

AMERICAN GAS ASSOCIATION MONTHLY

SEPTEMBER • 1937

Convention Offers Attractive Program

•

Industrial Safety Pays Big Dividends

W. E. MITCHELL

•

Home Service Today and Tomorrow

ELIZABETH SWEENEY

•

Evaluating Natural Gas Companies

PAUL R. TAYLOR



Accounting Section

LUNCHEON CONFERENCES

HOTEL CLEVELAND

Wednesday, September 29, 1937

12:30 p. m.

LIVELY
INTERESTING
INSTRUCTIVE
CHALLENGING

CREDITS and COLLECTIONS

Leader

JOHN A. WILLIAMS
Syracuse

CUSTOMER RELATIONS

Leader

J. GORDON ROSS
Rochester

CUSTOMER ACCOUNTING

Leader

EDWARD J. TUCKER
Toronto

GENERAL ACCOUNTING

Leader

HERBERT A. EHRLMANN
New York

AMERICAN GAS ASSOCIATION MONTHLY

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Accuracy to two-thousands of one per cent is obtained with these instruments at the A.G.A. Testing Laboratory at Cleveland. Delegates and guests at the annual convention will have opportunity to view this and other specially devised research and testing equipment

AMERICAN GAS ASSOCIATION MONTHLY

James M. Beall, Editor

Cleveland Convention Offers Many Attractions

THE combined incentives of a splendid program, an opportunity to inspect the A. G. A. Testing Laboratory, and a chance to visit a major center of gas appliance manufacture, have already resulted in a flood of reservations at Cleveland hotels for the period of the nineteenth annual convention of the American Gas Association which takes place September 27-October 1. Advance reports from these hotels show reservations upwards of one thousand with the total being swelled daily. This early evidence of interest assures a large and representative gathering of the gas industry to participate in the discussions of vital problems of the industry.

Sessions of the convention are being divided between the Statler and Cleveland Hotels. General sessions and meetings of the Commercial and Industrial Gas Sections will be held at the Statler Hotel while the Accounting and Technical Sections and the Natural Gas Department will meet at the Cleveland Hotel. The President's Dinner and other executive functions will also be held at the Cleveland.

As in the past, sectional meetings will be devoted to local and specialized problems while the general sessions will cover broader subjects of national importance. An innovation in this year's program is the holding of a general session Wednesday evening of convention week, combining business and entertainment features. Herman Russell will deliver the President's address at this session. President Russell's remarks are anticipated with great interest. Various studies conducted by the Rochester Gas & Electric Corp. of which he is president, have attracted nationwide attention. In addition his constructive and intelligent leadership of Association affairs during the past year has won for him the admiration and respect of the entire industry.

The evening session will also include the award of medals to individuals in the gas industry who have performed distinguished service during the year. These are the A. G. A. Meritorious Service Medal, the Charles A. Munroe Award and the Beal Medal.

A feature of this session will be a concert by the Male Chorus of the Rochester Gas and Electric Corporation. This Chorus, composed entirely of employees under the direction of Frank Houston, manager of domestic sales, has gained an enviable reputation during the six years of its existence. Presenting from 30 to 40 concerts each year, it has become so popular that only about one-half of the requests for concerts can be filled.

N. C. McGowen, president, United Gas Public Service Corporation, Houston, Texas, who has been nominated for president of the Association for the coming year, will make an important address at the first general session. Under the title, "Conservation—An Industry Opportunity and Responsibility," Mr. McGowen is expected to clarify the industry's views on the conservation of natural gas.

A "must" program for the gas industry will be outlined by Walter C. Beckjord, vice-president and general manager, Columbia Gas & Electric Corp., New York, at the first general session. His address, entitled "What the Gas Industry Must Do Next," is expected to be a highlight of the convention. This session will also include an address on "Serving American Industry" by Frank H. Adams, president of the Surface Combustion Corporation, Toledo, Ohio.



Herman Russell

The final general session, Thursday morning, will deal with such timely subjects as national advertising, housing, personnel management and customer relations. Charles C. Parlin of The Curtis Publishing Company will open the session with an address, "Telling the Story Nationally." For the past quarter of a century Mr. Parlin has directed the commercial research work of The Curtis Publishing Company and is a recognized pioneer in market research fields as well as an authority on cooperative national advertising.

Conrad N. Lauer, president of The Philadelphia Gas Works Company, and a well-known leader of the gas industry, will speak on "Customer Relations." The related problem of "Industrial Relations and Personnel Management"



Famous Male Chorus of the Rochester Gas and Electric Corporation who will present a concert at the annual convention

will be presented by T. H. A. Tiedemann, former executive assistant to the president of the Standard Oil Company of New Jersey.

A prominent place on the convention program has been reserved for a discussion of the vast home building movement now current in America and the opportunities offered to the gas industry to take advantage of this new market. In this connection, Dwight James Baum, who has designed some of the most beautiful homes and university buildings in this country and since 1931 has been architectural consultant for *Good Housekeeping*, will address the final general session.

To Inspect Laboratory

Since this is the first time in the Association's history that the convention has been held in Cleveland, it is expected that visiting delegates will want to take advantage of the unusual opportunity to inspect the A. G. A. Testing Laboratory and gain first-hand information of the broad program of appliance testing and research which is conducted there. The Laboratory will be open during the entire convention for such purposes.

Wednesday has been designated as executives' day and the morning program will be an invitational affair. Two one-hour sessions will be held in the Laboratory building, starting at 10:00 A.M. and ending at 12:00. The

principal speakers at these sessions will be R. W. Gallagher, vice-president, Standard Oil Company of New Jersey, and B. J. Mullaney, vice-president, The Peoples Gas Light and Coke Co., Chicago, both past presidents of the American Gas Association. The program will also include music by an orchestra and singing by the East Ohio Quartet. Ample time has been allowed for complete inspection of the Laboratory.

Advertising Program

Interesting developments in the national advertising program will be discussed at a luncheon symposium on Thursday at the Cleveland Hotel. Short addresses will be made by T. J. Strickler, chairman of the Committee to Conduct National Advertising, and by two representatives of participating gas companies who will describe the use of tie-in material. Thereafter the meeting will be thrown open for discussion.

Sectional and departmental programs get under way Monday morning with the meeting of the Natural Gas Department. The morning program includes addresses by George E. Welker, chairman of the department, President Russell, and Alexander Forward, managing director of the Association. F. M. Banks, vice-president of the Southern California Gas Company, and chairman of the Commercial Section, will speak on the vital subject of "Meeting

Competition." A paper on "Necessary Standby Fuel and Equipment for Industrial Natural Gas Customers," will conclude the first session.

What the gas industry proposes to do in connection with New York's World Fair will be described by William T. Rasch, president of the Association of Gas Appliance and Equipment Manufacturers, at the afternoon session of the Natural Gas Department. This meeting will also include addresses on "Legislation and Taxation" by William A. Dougherty, Gas Companies, Inc., New York, and "2000 Years of Progressive Evolution of the Worker," by A. A. Nicholson, The Texas Corporation, New York.

The program for the Accounting Section provides for meetings of the section on Tuesday and Thursday afternoons and luncheon conferences on Wednesday. An exhibit of accounting machines and office appliances will be a feature of the program, which includes a wide array of topics of interest to accountants.

Three meetings have been arranged for the Commercial Section and the program includes such outstanding

Convention Entertainment

THE Entertainment Committee is completing arrangements for an unusual program at this year's convention for the entertainment of delegates and guests. While the final program cannot be announced at this time, the following is a tentative schedule of events:

Tuesday Evening, Sept. 28

9:00 P.M.—President's Dance, Ballroom, Hotel Statler. Dancing until midnight.

Wednesday Afternoon, Sept. 29

1:00 P.M.—Ladies' Luncheon in the Red Room, Cleveland Hotel.
2:00 P.M.—Ladies' Card Party at Cleveland Hotel.

Wednesday Evening, Sept. 29

8:00 P.M.—Evening General Session in the Ballroom of the Hotel Statler, accompanied by entertainment and followed by dancing until 1:00 A.M.

A feature of this event will be a Concert by the Rochester Gas and Electric Corporation's Male Chorus.

Golf

Arrangements have been made with golf clubs which will be open to A. G. A. delegates from Monday, September 27 to Friday, October 1, by payment of regular club charges for green fees, etc.

speakers as Hall M. Henry, Utility Management Corp., New York; H. O. Loebell, Natural Gas Pipe Line Co. of America, Chicago, and Hugh Cuthrell, The Brooklyn Union Gas Company. The major portion of the meeting Wednesday will be devoted to a panel discussion led by B. A. Seiple, Jersey Central Power and Light Co., Asbury Park.

At the meeting on Tuesday, J. F. Quinlan, director of the newly established Home Appliance Planning Bureau, will outline in detail the plans for the gas industry in this important activity. Mr. Quinlan's paper will include a description of the nationwide architectural competition which will be launched during December and through which architects and designers of homes will be supplied with information on gas and gas appliances. His paper will also tell of the demonstration home building program which is planned to follow this competition.

Home Service Program

The increasingly popular Home Service Breakfast will be held Wednesday morning at 8:30 at the Hotel Statler. At this breakfast there will be a group of short talks by home service directors on current home service activities. President Russell will extend greetings and Elizabeth Sweeney, chairman of the Home Service Committee, will preside.

Careful planning is reflected in the Industrial Gas Section program which will occupy three full afternoon sessions in addition to a luncheon meeting. Departing from usual practice, the second and third sessions each will be devoted to three subjects with four individuals presenting different angles of each subject. An open forum will follow the formal presentation of each topic. F. X. Mettenet, The Peoples Gas Light and Coke Co., Chicago, will be the principal speaker at the luncheon meeting.

Engineers, chemists and other technical men will find ample material for their attention in the Technical Section program which will consist of three afternoon meetings. A motion picture on "Employee Training" will be a special feature of this program.

Following are tentative departmental and sectional programs:

NATURAL GAS DEPARTMENT

MONDAY MORNING, SEPTEMBER 27

10:30 o'clock



George E. Welker

Opening Remarks
and Chairman's
Address

GEORGE E.
WELKER,
United Natural
Gas Company,
Oil City, Pa.

Address of President
HERMAN RUSSELL,
Rochester
Gas and Electric
Corporation,
Rochester,
N. Y.

Address of Managing Director
ALEXANDER FORWARD, American Gas
Association, New York City, N. Y.

Meeting Competition

F. M. BANKS, Southern California Gas
Company, Los Angeles, Calif.

Necessary Standby Fuel and Equipment for
Industrial Natural Gas Customers
(Speaker to be announced.)

MONDAY AFTERNOON, SEPTEMBER 27

2:00 o'clock

New York's World Fair

WILLIAM T. RASCH, American Gas
Products Corporation, New York City,
N. Y.

2000 Years of Progressive Evolution of the
Worker

A. A. NICHOLSON, The Texas Corpora-
tion, New York City, N. Y.

Legislation and Taxation

WILLIAM A. DOUGHERTY, Gas Com-
panies, Incorporated, New York City,
N. Y.

Report of Nominating Committee
Election of Officers



*The East Ohio Gas Company will act as hosts to delegates and guests at the convention.
Sketched above is the office building of the company*

Charles Coolidge Parlin, who will speak at the general session, September 30, invented the phrase "Commercial Research." Twenty-six years ago he established for The Curtis Publishing Company the first organization ever instituted by an industrial concern for the study of markets. During the past quarter of a century the commercial research work of The Curtis Publishing Company has been under his direction and has been recognized as the outstanding factor in pioneering in market research fields.

There are many firsts to the credit of his research organization—the first attempt to supply publishers' representatives with merchandising information, the first formal presentation of marketing data to manufacturers, the first use of charts to illustrate talks on merchandising, the first attempt to make a census of distribution, the first every-home consumer survey, the first pantry inventory, the first dry waste survey.

Mr. Parlin has contact with two-score industrial associations interested in cooperative advertising and has addressed the conventions of many of them on their advertising problems.



Charles C. Parlin

ACCOUNTING SECTION

TUESDAY, SEPTEMBER 28

2:00 o'clock



H. E. Cliff

Address of Chairman
H. E. CLIFF,
Public Service
Electric & Gas
Co., Newark,
N. J.

Nominating Committee

F. L. GRIFFITH,
Chairman, The Peoples Gas
Light & Coke
Co., Chicago, Ill.

Luncheon Conference Committee

G. B. WEBBER, Chairman, Public Service Electric & Gas Co., Newark, N. J.

Customer Relations Committee—"Organize for Better Service"

J. GORDON ROSS, Chairman, Rochester Gas & Electric Corp., Rochester, N. Y.

Uniform Classification of Accounts Committee

F. L. GRIFFITH, Chairman, The Peoples Gas Light & Coke Co., Chicago, Ill.

General Accounting Committee—"General Accounting Problems"

H. L. GRUEHN, Chairman, Consolidated Gas Electric Light & Power Co., Baltimore, Md.

Exhibit Committee

P. J. SWEENEY, Chairman, The Peoples Gas Light & Coke Co., Chicago, Ill.

THURSDAY, SEPTEMBER 30

2:00 o'clock

Accounting Machines Committee—"Merchandise Accounting by Machines"

G. F. TREXLER, Chairman, Utility Accountants and Tax Consultants, New York, N. Y.

Office Management Committee—"Wage Incentive Plans"

J. J. NATALE, Chairman, Office Management Committee, Philadelphia Electric Co., Philadelphia, Pa.

Health Promotion Plans

DR. WILLIAM J. MCCONNELL, Ass't Medical Director, Metropolitan Life Insurance Co., New York, N. Y.

Customer Accounting Committee

W. E. SCOTT, Chairman, Boston Consolidated Gas Co., Boston, Mass.

(a) "Averaged Billing"

E. F. EMBREE, New Haven Gas Light Co., New Haven, Conn.

(b) "Customer History Records—Advantages"

F. C. REEL, Cincinnati Gas & Electric Co., Cincinnati, Ohio.

(c) "Customer History Records—Disadvantages"

G. I. SIMPSON, The Peoples Gas Light & Coke Co., Chicago, Ill.

Benediction

H. C. DAVIDSON, Consolidated Edison Co. of New York, New York, N. Y.

ACCOUNTING SECTION LUNCHEON CONFERENCES

WEDNESDAY, SEPTEMBER 29

12:30 o'clock

The following subjects will be discussed at the luncheon conferences to be held at the Cleveland Hotel:

Credits and Collections

Leader, John A. Williams

Customer Accounting

Leader, Edward J. Tucker

Customer Relations

Leader, J. Gordon Ross

General Accounting

Leader, Herbert A. Ehrmann

COMMERCIAL SECTION

TUESDAY, SEPTEMBER 28

2:00 o'clock

Address of Chairman

F. M. BANKS,
Southern California Gas Co.,
Los Angeles, Calif.

Report of Nominating Committee

CHAS. E. BENNETT, Chairman, Manufacturers Light & Heat Co., Pittsburgh, Pa.



F. M. Banks

Election of Officers

The Road Back

HALL M. HENRY, Utility Management Corp., New York, N. Y.

Stimulating Dealers Activities
(Speaker to be announced.)

L. S. Reagan, vice-president of The Webster Engineering Company, Tulsa, Oklahoma, will be one of the principal speakers at the first session of the Industrial Gas



L. S. Reagan

Section. He is vice-chairman of the important Steam Generation Committee of that section.

Born in Tullytown, Pennsylvania, on August 7, 1888, he attended public schools in Philadelphia, Pa., and Osborn, Ohio, and was graduated from Williamson College in 1908 with a degree in Mechanical Engineering. His first job was junior engineer for D'Olier Engineering Company, Philadelphia. Later he became erecting engineer in the Hydraulic Turbine Department of Allis-Chalmers Co., Milwaukee, Wisconsin. He served in the Army Air Corps from 1917 to 1919.

In 1919 Mr. Reagan became assistant general manager and chief engineer for the Southwestern Light and Power Co., which position he held until 1928 when he was made vice-president and general manager of The Webster Engineering Company.

The Association Home Planning Program
JOHN F. QUINLAN, A. G. A. Headquarters, New York, N. Y.

WEDNESDAY, SEPTEMBER 29

2:30 o'clock

Gas Appliance Salesmanship
GERALD E. STEDMAN, Kramer-Krasselt Co., Milwaukee, Wis.

Panel Discussion to be led by

B. A. SEIPLE, Jersey Central Power & Light Co., Asbury Park, N. J.

THURSDAY, SEPTEMBER 30

2:00 o'clock

Gas Appliance Needs of the Industry
H. O. LOEBELL, Natural Gas Pipe Line Co. of America, Chicago, Ill.

The Certified Range Program

HUGH CUTHRELL, The Brooklyn Union Gas Co., Brooklyn, N. Y.

Showmanship in Business

(Speaker to be announced.)

Robert G. Guthrie, who will address the Industrial Gas Section, Tuesday, September 28, is a consulting metallurgist and chief metallurgist of The Peoples Gas Light and Coke Company, Chicago, with which company he has been associated for sixteen years.

He heads a staff consisting of physicists, metallographists, chemists, and a thermal engineer. His Laboratory is equipped with a most varied and complete collection of the finest microscopes, furnaces, and precision accessories. This arrangement allows for great versatility and scope in research. Some problems successfully handled have been the development of furnaces and furnace atmospheres; air-conditioning equipment; special steels; the utilization of minerals; snake venoms; and economical production of nitrogen. In addition to an extensive program for his company, Mr. Guthrie is consultant to a number of the country's outstanding concerns.

Mr. Guthrie was president of the American Society for Metals in 1930, and preceding that appointment, had held all the various offices leading to the presidency. He is now a member of the Board of Directors and Advisor to the "Metal Progress" editorial staff.

He is chairman of the Ferrous Metal Treating Committee of the American Gas Association.

INDUSTRIAL GAS SECTION

TUESDAY, SEPTEMBER 28

12:30 o'clock

Hotel Statler

THE INDUSTRIAL GAS CLUB LUNCHEON

Interdependence of Company and Department Managements in Conducting Industrial Gas Sales

F. X. METTENET, The Peoples Gas Light & Coke Co., Chicago, Ill.

TUESDAY, SEPTEMBER 28

2:00 o'clock



Ralph L. Manier

Address of Chairman—"Factors Contributing to Greater Industrial and Commercial Gas Sales"

RALPH L. MANIER, Niagara Hudson Power Co., Syracuse, N. Y.

Election of Officers

What Industrial Gas Men Should Know about Steel

ROBERT G. GUTHRIE, Chairman, Ferrous Metals Committee, Chicago, Ill.

Industrial Department Management

ALBERT A. SCHUETZ, Milwaukee Gas Light Co., Milwaukee, Wis.

Modern Methods of Applying Gas in Large Power Boilers

L. S. REAGAN, Vice-Chairman, Steam Generation Committee, Tulsa, Okla.

WEDNESDAY, SEPTEMBER 29

2:00 o'clock

COMMERCIAL GAS AND EQUIPMENT FORUM
Unit Heater Applications in Commercial Establishments

Leader—OLIVER LLOYD MADDUX, Hamilton, Ontario.

Five-minute presentations by four selected speakers.

Open Forum.

Evaluation of Gas Commercial Cooking

Leader—CHARLES E. LUCKE, JR., New York, N. Y.

Five-minute presentations by four selected speakers.

Open Forum.

Developing Dealer Cooperation in Hotel and Restaurant Appliance Sales

Leader—T. J. GALLAGHER, Chicago, Ill.

Five-minute presentations by four selected speakers.

Open Forum.

THURSDAY, SEPTEMBER 30

2:00 o'clock

INDUSTRIAL GAS AND EQUIPMENT SYMPOSIUM

Liquid Heating with Immersion Gas

Leader—L. B. CROSSMAN, Boston, Mass.

A headliner at this year's convention will be Dwight James Baum, widely known architect and designer of many of the most beautiful homes in America, who will be



Dwight J. Baum

a speaker at the general session, Thursday morning, September 30. Mr. Baum is architectural consultant for Good Housekeeping magazine.

Since his graduation from Syracuse University in 1909, he has won many honors in his chosen field. In 1932 he received the gold medal of the Architectural League of New York "for the simplicity and charm of his work," an award rarely made for residential work. He has been awarded the degree of Doctor of Fine Arts at Syracuse University. He has been awarded the gold and bronze medals by the Better Homes in America competition for the best houses in America during the past five years.

Mr. Baum has served as a member of many important architectural juries, is a chairman of critics at the school of architecture of Columbia University by appointment of the American Institute of Architecture, and a member of the executive board of the Architectural League of New York and the New York Chapter of American Institute of Architects.

Specializing in the design and construction of residences he has handled with dignity and effectiveness various styles of architecture, Colonial, Tudor, French and Italian Renaissance, Spanish and Gothic, adapting them to diverse American settings. He has planned many homes for a distinguished clientele.

Five-minute presentations by four selected speakers.
Open Forum.

Convection Heating with Gas

Leader—KARL EMMERLING, Cleveland, Ohio.

Five-minute presentations by four selected speakers.

Open Forum.

Wholesale Baking with Gas

Leader—LAWRENCE R. FOOTE, Rockford, Ill.

Five-minute presentations by four selected speakers.

Open Forum.

TECHNICAL SECTION

TUESDAY, SEPTEMBER 28

2:00 o'clock

Address of Chairman



M. I. Mix

M. I. Mix, The Peoples Gas Light & Coke Co., Chicago, Ill.

Report of Nominating Committee

F. A. LYDECKER, Chairman, Public Service Electric & Gas Co., Newark, N. J.

Report of Gas Production Committee

R. E. KRUGER, Chairman, Rochester Gas & Electric Corp., Rochester, N. Y.

Coordination of Gas Conditioning Research

O. S. HAGERMAN, Atlantic Seaboard Corporation, New York, N. Y.

Corrosion of Metals and Alloys by Flue Gases

LOUIS SHNIDMAN, Rochester Gas & Electric Corp., Rochester, N. Y.

Report of Distribution Committee

D. P. HARTSON, Chairman, Equitable Gas Co., Pittsburgh, Pa.

WEDNESDAY, SEPTEMBER 29

2:00 o'clock

Principles of Gas Scrubbing

PROF. C. C. FURNAS, Yale University, New Haven, Conn.

Polymerization—What It Means to the Gas Industry

F. E. FREY, Phillips Petroleum Co., Bartlesville, Okla.

and

A. G. A. Day at Exposition

Sunday, September 26, the day before the annual convention gets under way in Cleveland, Ohio, has been proclaimed A. G. A. Day at the Great Lakes Exposition. Delegates to the convention who wish to see the Exposition in full operation will find it worthwhile to arrive in Cleveland a day early to take advantage of this opportunity. It will be their last chance as the Exposition closes on the following day.

J. S. CAREY, The W. M. Kellogg Co., New York, N. Y.

Problems of Regulator Freezing

M. A. HARDIE, JR., Montana Power Co., Butte, Mont.

THURSDAY, SEPTEMBER 30

2:00 o'clock

Report of Chemical Committee

J. F. ANTHERS, Chairman, The Brooklyn Union Gas Co., Brooklyn, N. Y.

Corrosion of Metals in Soils as a Factor in the Selection of Pipe Materials

DR. SCOTT EWING, Research Associate, National Bureau of Standards, Washington, D. C.

Experiences in Cincinnati and the Ohio Valley during the 1937 Flood

E. A. MUNYAN, Cincinnati Gas & Electric Co., Cincinnati, Ohio.

Employee Training

Introduction—DR. MORRIS S. VITELES, Philadelphia Electric Co., Philadelphia, Pa.

Selecting and Training Apprentice Linemen—A film with comments by L. G. WITMER, Philadelphia Electric Company.

those who might eventually also extend their present electrical interests to also include gas.

"This is now in prospect, a large majority of the members wholeheartedly expressing their wishes for the inclusion of the gas interests in the belief that immeasurable benefits will accrue to all members and to the public."

The objects of the Electrical and Gas Association of New York have been stated as being to act as the central organization and headquarters for the electrical and gas industries of the Metropolitan New York area; to promote the general interests of the electrical and gas industries; to deal with problems concerning or affecting these industries; to serve the public by coordinating the efforts of all branches of these industries toward rendering more extensive and efficient services; to organize and promote the development of markets for the Members of the Association; to promote closer social relationships with the Members of the Association; to promote mutual respect and cooperation between all branches of the electrical and gas industries; to promote appreciation by the public of the advantages to be realized from the fullest use of modern electrical and gas facilities and to direct the activities of the Association along constructive lines by the encouragement of sound, ethical and progressive business methods and practices.

The Association, whose headquarters are located in Grand Central Palace, 480 Lexington Avenue, maintains a comprehensive Electrical and Gas Institute comprising some 40,000 square feet of area where products of these industries are displayed and demonstrated. The Institute is open to the public daily excepting Saturdays and Sundays from 9:30 in the morning until 4:30 in the afternoon, during which hours regular inspection tours are conducted by competent guides. The uses of electricity and gas and the available appliances for such use are interestingly demonstrated and other information given at the Institute.

Electrical Association Votes to Include Gas Interests

At a special meeting of the members of the Electrical Association of New York, Inc. held at its Electrical Institute in Grand Central Palace August 16 an overwhelmingly favorable vote was given for the inclusion of gas interests within the membership and for a change in the name of the Association to the Electrical and Gas Association of New York, Inc.

Commenting upon the action taken, C. E. Stephens, president of the association, stated:

"The trend toward rendering gas as well as electric service to the public and in supplying the multitudinous appliances for their convenient use through a single source has become increasingly evident. The consolidation of the local electric and gas

utilities, the marketing of gas appliances by manufacturers heretofore primarily engaged in producing only electrical products, and the distribution of this gas merchandise, as a natural sequence, through established electrical distributing channels and in turn through established electrical dealers, is already the practice in many cases. There also appears to be a distinct tendency for manufacturers of gas products to progressively engage in the manufacture of electrical products and to distribute these through their established distributor and retailer channels.

"With the common interests of these two industries so closely paralleling each other, it appeared desirable that the scope of the Electrical Association's activities be broadened to better serve those members already interested in both industries and

Taken as a whole, I very much doubt whether in any country the gas industry gives such good service as it does in America. Yet even in America, the scope of this work is belittled by the public who seem unable to have the least appreciation of what such service is costing.—M. MILNE-WATSON, Gas Light & Coke Company of London, England.

A. G. A. E. M. Annual Meeting

The second annual meeting of the Association of Gas Appliance and Equipment Manufacturers will be held at the Statler Hotel, Cleveland, Ohio, Monday, September 27, 1937 at 10:00 A.M. W. T. Rasch, president of the association will preside at the meeting.

Divisional meetings will be held on Monday afternoon.

Safety Pays Big Dividends

PART I

WE Americans are notoriously careless regarding human life. The record of the deaths and injuries on our highways from automobile accidents is one to make any thinking person shudder. Nor has our industrial record been much better. It is an old saying that our transcontinental railroads cost a life for every tie. Twenty years ago it was an accepted rule on dam and power house construction that you'd have a man killed for each million dollars of construction. Linemen's work was notoriously hazardous. The number literally burned up was terrible.

Well, fortunately, we've become somewhat more civilized in these later years. No longer do we look upon accidents as a matter of course—as something that can't be helped and that must be accepted as an inevitable part of the business.

What brought this change about? An enlightened social consciousness, leading to adequate workmen's compensation laws, may have had something to do with it. Let's hope it did. But a far more important factor was a realization of the economic waste—the actual dollars and cents lost through needless accidents. The pocketbook nerve is still the most sensitive one in the body corporate of business. Despite increased taxes and the higher wages, the main business of business is to provide needed and useful services at a profit. I hope to show that a sound, sane safety program will pay big dividends.

Why have a safety program?

What constitutes a sane safety program?

What can it accomplish?

How far should it go?

Men as individuals are like business. The pocketbook appeal is the first among many reasons why they work. There are many risks and many opportunities for accidents in any business employing men. These accidents cost

By W. E. MITCHELL

Vice-President and General Manager,
Georgia Power Company, Atlanta, Ga.

money and are an economic waste aside from the needless human suffering. There are many hazards peculiar to the public utility business with which I am most familiar. The training of men in safe practices and the avoidance of accidents has, we believe, fully justified careful organizing, careful training and sustained follow-up in safety as part of the regular duties of all employees.

Perhaps the most important thing about a safety program is that it is *habit forming*. It forms habits of the right kind, and therefore it builds character and makes better men.

This is the second of a series of Safety Messages by prominent utility executives which is being sponsored by the Accident Prevention Committee. Mr. Mitchell's address was presented at the annual convention of the Edison Electric Institute in Chicago, June 3, 1937. It will be published in two parts, the second of which will appear in the next issue of the Monthly.

A man who has become conscious of "tripping hazards," by reason of his company training, doesn't leave a pile of rubbish or an empty bucket on the dark basement stairs in his home. Automatically, he puts the bucket or the trash where it ought to be. It has become a habit. He does it without thinking about it. It has become almost *reflex action* for him to follow correct safety practices in *all* of his life.

The reflex functioning is one of the most amazing things about the human body. We can do some things by conscious thinking; but we can, and do, do many more things through our reflex nervous system. In a body that is healthy and functioning properly, the brain occupies a position like the top executive of a big corporation. He formulates policies, he attends to unusual and extraordinary problems that arise. But all of the details are attended to by his subordinates. He doesn't have to bother about the routine but is free to consider the bigger

problems. So, with the body, the reflex system looks out for the details, attends to the routine and leaves the brain free to handle the job of thinking.

The reflex system attends to the job of breathing, digesting of food and similar functions, and does it very cleverly. We don't have to teach it how to do those things. It knows them when we are born. *But the reflex system will also take over a lot of other jobs and attend to them, too*, if we will only give it a chance. When we form a *habit*, we have turned over to the reflex system a job that the brain would otherwise have to attend to and bother with. And once the habit is formed, the reflex system will do the job *better* than the brain can do it.

Avoiding things that hurt us or other people (safety practices) is certainly something that is important to each of us. It would seem that everybody would learn this habit in childhood, and

would have this habit as one of his assets for the rest of his life.

If everybody did form this habit in childhood, there would be no need for safety programs. Unfortunately, very few people acquire it in childhood. A great many grow up with the *contrary habit* of carelessness, thoughtlessness, indifference to the safety of others. That is why safety programs are needed. With such people the program arouses their interest in safety, starts them to *thinking* about its importance, causes them to become *aware* of their own bad habit of carelessness, provides constant *reminders* to keep the brain working along the proper lines, offers recognition and *rewards* for good practices and punishments for bad practices, impresses the idea deeper and deeper into the man's *mind* until it becomes a part of him, and, finally, it has become a *habit*.

The company that does this sort of thing for its employees benefits them as well as itself. An employee who

has cured his bad habit of carelessness and acquired a good habit of carefulness will acquire other good habits. He is a better man in every aspect of his life—as an employee, in his home life, as a citizen.

No company need apologize for its safety program. In fact, it is the duty and obligation of a company to take the leadership in activities of this kind from which the employees benefit.

Attitude Important

The sharp reduction in accidents that was made in the first few years after our company inaugurated its safety program, even in the first year, was undoubtedly due primarily to the fact that the company had demonstrated that it *cared* whether accidents happened or not. In that first year comparatively few of the men had had time to break careless habits and acquire safety habits. Not a change in individual habits but a change in the *company's attitude* brought about a sharp reduction in accidents in a comparatively short period of time.

All of us want to feel that somebody else cares about what happens to us. Children will go out and hurt themselves deliberately if they feel that they have been slighted. Grown people don't do that very often but they can be mighty careless about themselves if nobody else cares about them. If the company is indifferent to the men's safety they are likely to be indifferent to their own safety.

Before our safety program was launched the men had a right to believe that the company didn't care whether they got hurt or not. They probably never thought it out consciously but the company's attitude influenced and affected their attitude. Slackness and carelessness were widespread simply because safety and carefulness were not being promoted and an enormous number of accidents occurred.

The foreman is the key man in any safety program but he'll never truly enter into it nor sell his men on it unless the superintendents, local, district and division managers and main office supervisory staff clear up to the general manager and president are also thoroughly sold on the worthwhileness of it. Therefore, a sane safety program must be organized from the top down.

Why Teach Safety?

To put it on the lowest basis—it saves your company real money. Reduction of accidents reduces compensation for lost time. Safe workmen are better and more efficient workmen.

Has it ever been your job to work for several hours futilely trying to resuscitate a fine young lineman and then, knowing in your heart it was an unnecessary accident, have to go and break the news to a poor, frightened, crushed young woman whose only means of support was that man? Unfortunately, that has been my painful duty a number of times. If nothing else had done so this would have made me a firm believer in safe practices.

The workman naturally grows careless. Familiarity may not breed contempt but it does dull the sense of danger. Mere talk won't rouse him. It's the foreman's job to watch out for him. Also the helpers. His best protection is thorough training in the fundamentals of safe methods of work. Then habit and instinctive reflex action may save him in a tight fix.

Organization Needed

All an organization needs to get started off is a Safety Council consisting of department heads with a president who genuinely believes in the work and is an official of standing in the company, and an alert young man, who is familiar with the company's operations, can meet and talk on the level, and not down to foremen and men, to act as secretary or director. Of course the secretary must be enthusiastic, must believe in the worthwhileness of the program and be capable of developing and handling more and more work, for assuredly it will grow in importance from year to year if properly directed.

Quarterly meetings of the general Safety Council may be sufficient if the division, district and local groups are properly organized. Foremen and crews working out of the same headquarters should meet at least once a week *on company time* for one hour. At these meetings a foreman or superintendent should take up at least one definite phase of safety work. The most recent lost time accident and how it might have been prevented can always be made productive of real live, worthwhile discussion once foremen and

men appreciate that their ideas and suggestions will be carefully considered. A talk by the president or general manager, particularly after a long siege of fighting trouble, such as followed the sleet storm of January 1, 1936, on our properties, or after a particularly bad accident, to let the men know their work and loyalty is appreciated and that the company is still solid for safety, is very helpful.

Definite, practical training in first aid and prone pressure method of artificial resuscitation should be carried out by every line and substation crew and by all operators, metermen and appliance service men. In our company all men in these groups, totalling approximately 2,500, have had such training. Over 900 have received the Red Cross certificate for having completed the Red Cross standard First Aid Course, which involves fifteen hours of special instruction.

Butler Trophy

A trophy, named in honor of our vice-president, the Frank L. Butler trophy, is competed for by the six divisions of the company's electric operations. It is awarded on the basis of lowest per cent of lost time accidents to total man hours worked. The honor of winning it is highly coveted. In the transportation department, the trainmen's section worked 4,500,000 man hours between December 16, 1932, and May 7, 1936, without a single lost time accident. Over 600 men worked over five and one half years without a lost time accident in all the hazards of traffic on Atlanta's crowded, narrow, crooked streets. The automobile, bus and truck garage men, with some 40 employees, have now worked 1,066,781 man hours; over seven years without a single lost time accident and are still going strong. In the past ten years a great reduction has been made in fatal and serious accidents. This didn't just happen.

A very necessary adjunct of our safety program has been the preparation of a Foreman's Handbook or Manual of normal operating practices with reference to getting clearances, handling cases of trouble, first aid, standard line equipment, etc. Definite rules covering testing and use of rubber gloves, handling of hot lines, the use

(Continued on page 327)

Twenty-Three Companies Win Awards in Refrigerator Sales Contest

GIANT "birthday" cakes were awarded to each of twenty-three gas companies who in their respective divisions achieved the highest records for the sale of gas refrigerators during the "Big Birthday Party" selling campaign sponsored by the A. G. A. Refrigeration Committee and the Association of Gas Appliance and Equipment Manufacturers. The campaign, which commemorated the tenth anniversary of gas refrigeration in the United States, lasted throughout April, May and June.

The company winners are as follows:

DIVISION 1: Washington (D. C.) Gas Light Company, and the Consolidated Edison Company of New York.

DIVISION 2: Providence (R. I.) Gas Company; Worcester (Mass.) Gas Light Company, and New Haven (Conn.) Gas Light Company.

DIVISION 3: Scranton (Pa.) Spring Brook Water Service Company; Central Indiana Gas Company (Muncie, Ind.) and Florida Public Service Company (Orlando, Fla.).

DIVISION 4: Southern California Gas Company (Los Angeles); Detroit (Mich.) City Gas Company and Ohio Fuel Gas Company (Columbus).

DIVISION 5: Greensboro Gas Company (Brownsville, Pa.); Grand Rapids (Mich.) Gas Light Company and the Manufacturers Light and Heat Company (Bellevue, Pa.).

DIVISION 6: North Penn Gas Company (Port Allegany, Pa.); Ohio Fuel Gas Company (Lorain Group); and Manufacturers Light & Heat Company (Ellwood City Branch).

DIVISION 7: Virginia Gas District Corporation (Staunton, Waynesboro and Covington offices); Manufactur-

ers Light & Heat Company (Chester, W. Va., and Wellsville, Ohio, branches) and the Arkansas-Louisiana Gas Company.

DIVISION 8: Consumers Power Company (Lansing, Mich.); Central Illinois Light Company (Springfield, Ill.) and Michigan Fuel and Light Company (Benton Harbor, Mich.).

Division 1 comprised seven metropolitan utilities on the Atlantic seaboard, namely: Boston Consolidated Gas Company; Brooklyn Borough Gas Company; Brooklyn Union Gas Com-

based on high records made in the "installations per 10,000 meters class."

In promoting these A. G. A. selling contests which have been conducted annually since 1933 through the Refrigeration Committee, trophies have been offered to stimulate company rivalry. The trophies in the 1934 "Go-Getter" contest were blue vases. Silver "Prosperity Cups" were offered in 1935, and gold-hilted "Swords of Merit" were granted last year.

The giant birthday cake was chosen as the trophy to symbolize for this year's campaign a decade of progress in public acceptance of the gas-operated automatic refrigerator which was introduced to the American buying public ten years ago by Servel, Inc., manufacturers of Servel Electrolux which recently completed its one-millionth refrigerator in its plant at Evansville, Indiana. The company was a collaborator in the "Big Birthday Party" campaign.

The effort of the individual sales person was an important factor in the campaign just closed, as it was in other years, hundreds of individual awards having been made to mem-

bers of the sales staffs of participating companies who made the highest number of sales during the drive.

Triple Refrigerator Sales

IN a special campaign, during June and July, featuring an Electrolux gas refrigerator with a choice of either an electric roaster grill or an electric kitchen ventilating fan, Consolidated Edison Company of New York, Inc., Westchester Lighting Company and cooperating dealers together sold 9,247 gas refrigerators with which 6,564 roaster grills and 2,470 fans were chosen. Of the refrigerators sold, 7,840 replaced ice boxes. Gas refrigerator sales for the same period last year in the same territory totaled 3,182.



Hall M. Henry, right, chairman of the A. G. A. Refrigeration Committee, and John W. West, Jr., secretary of the Commercial Section, reading reports of winning companies in the nation-wide refrigerator sales contest

pany; Consolidated Edison Company of New York; Kings Appliance Corporation, Brooklyn, N. Y.; Philadelphia Gas Works Company, and the Washington Gas Light Company. Division 2 comprised companies having 30,000 or more meters with a gas rate over 12 cents per therm. Divisions 3, 4, 5 and 6 comprised companies with the same rate, having respectively, 3,001 to 30,000 meters, 70,001 or more meters, 9,000 to 70,000 meters, and 3,001 to 9,000 meters. Companies in Division 7 were those having 3,000 meters or under regardless of the rate per therm. Awards made in Division 8 were

Dear Mystery Chef:

I listen regularly to you. As to gas versus electric I looked at both ranges. I even won the dinner at an electric demonstration. I decided to get a gas range. I'm delighted with it and feel sure nothing could offer me more than I am getting with this stove and it is the last word in beauty.

Sometimes I wish you could see my daughter poring over your book. Last Monday when I wanted to make a lemon pie, "Be an Artist at the Gas Range" was missing. When she returned from Drexel that evening, she had carried the book to school. She must prepare the luncheon on Monday of this coming week.

Mrs. T. R. G.
West Philadelphia, Pa.

I feel as you do that a large percentage of the so-called pleasant family relationships is due to well-planned meals. The dinner table in so many homes is the time of congenial fellowship and what is more fun than the whole family joining together in popping corn, making pop-corn balls, making candy or pulling taffy? I trust that your success in teaching others how to be an artist at the gas range may ever continue.

Mrs. N. F.
Des Moines, Iowa.

I heard your broadcast about how you happened to take up the art of cooking. It is indeed an honor to be a master of arts at cooking. Proper diets, food properly cooked mean so much,—more than many realize. I believe that many a criminal might have been saved and taught to live to serve God had he come from a Christian home and also had a proper diet.

Mrs. S. R.
Winnebago, Minn.

Just finished listening to your program and enjoyed it immensely as I always do. There is one thing I've wanted to tell you for some time and here it is. I thank my Heavenly Father for a man who is able to stand before a multitude of unseen people and give Him the glory for the part He has in our daily life.

Mrs. J. E. L.
Norfolk, Nebr.

Congratulations on your broadcast today. If more people would advise church attendance as you did, America would be composed of better people and perhaps some day there would be no more wars, or strikes. If we can learn to love our brother as ourselves and "so pass through things temporal, that we lose not finally the things eternal" there is hope.

Mrs. W. G. H.

While I have never been known to write to anyone in connection with a broadcast, still I feel I should be very unfair were I not to tell you at least something of all your broadcasts have meant to me. It was through your recommendation that we purchased our new gas stove in January, and I have had your cook book for a much longer time and refer to it daily. It is by far the most valuable help in cooking I have ever had. Your voice is a familiar and welcome guest each Tuesday and Saturday.

Mrs. J. E. F.
Pittsfield, Mass.

It certainly is a wonderful service to have such a fine cook book given us by our gas companies, but considerable credit belongs to you. I have never seen such a fine helpful cook book. I enjoy your broadcasts so much. They are very helpful. The gas companies are certainly very fortunate in having such an able man to advertise for them. I agree with you that gas is the best fuel to cook with.

Mrs. T. M. C.
Cranston, R. I.

I agree with you about the good food that is so hard to find these days. I think you are the greatest chef in the world. I cook everything from your book and everyone wonders that I can cook so well because I have only one arm. But I owe it all to you and your cook book and I agree with all your philosophy about life. You have to love to cook to make it a success.

Mrs. C. S. B.
Rochester, N. Y.

I am a girl of fourteen, and I listened to your program last Saturday. I also tried your recipe for the candy you gave over the radio called, "Cocoanut Fudge" and everybody raved about it.

L. G.
Springfield, Mass.

I think it would be very fine for you to put out a children's cook book. I think the Mystery Chef Cook Book is the very finest on the market. I am considered a very good cook myself, as I have baked all the mince pies for the New York Women's Exchange for the past 30 years and at one time made not less than 15 to 20 cakes everyday for them. Your recipes are so economical and delicious.

Mrs. C. D. M.
New York, N. Y.

I have just finished baking a cake from one of your recipes. It has turned out beautifully and I am so grateful to you for your book, "Be an Artist at the Gas Range" that I feel compelled to drop you this "Thank you" note. It is very foreign to me to write to people appearing on radio stations but I am so pleased and so grateful I must say "Thank you" and tell you that sincerely and from the bottom of my heart, it is the best cook book I've ever used. Even the dumbest of the dumb couldn't have a failure by following your instructions as they are given in simple language and are very explicit.

Miss A. M. C.
Corona Del Mar, Calif.

Even England Listens to The Chef

(From *The Gas World*, London)

IDLY turning the tuning knob of a wireless set a night or two ago we were interested more than a little to hear a speaker with a pronounced American accent "telling the world" that gas was the most economical, the cleanest, and the quickest heating and cooking agent known. It was a short-wave station from which this excellently worded advertisement for gas came, and in a little while the announcement followed that the National Broadcasting Company of New York was responsible for the whole program.

This simple little affair made us pause and think once more of the potentialities of our hundred-year-old source of energy. Three thousand miles away in a land of Niagaras and vast power plants actuated therefrom gas still holds its place in the national life as a real live force. If that is the case there, what have we to fear here despite all "the slings and arrows of outrageous fortune?"

The tonic effect of a broadcast advertisement like the above is very great, and it would be a good thing indeed if we in Europe emulated Uncle Sam in the matter. Why not a chat on the subject from Radio Normandie or Radio Luxembourg? The whole of the British Isles listens in to these stations on Sundays. Perhaps the British Commercial Gas Association Advertising Committee will consider the matter sympathetically?

While waiting for one with whom I had an appointment Saturday, April 3, I listened to part of your broadcast. You and your program were new to me but the recipe for strawberry shortcake was old in its basic idea. When I was a small girl my grandparents lived on a large Iowa farm and I had four doting uncles for whom I would do anything if I thought it would please them. One of those things was to make strawberry shortcake for them containing sometimes as many as six or seven quarts of berries. It was a very rich and palatable dessert but in those days calories were not important—men ate and had dyspepsia—the ladies ate and had ample curves.

However, for the past fifteen years I have been continuously on the road, coast to coast and border to border and even in other countries; therefore, there has been little chance to indulge in the culinary arts. I am stationed here for a few weeks and have an apartment with an infinitesimal kitchen and would very much like to try some of the recipes you mentioned are in your cook book. Seems funny but this is the first letter to anyone connected in any way with the radio that I have written.

Miss S. S.
Philadelphia, Pa.

I am indebted to you for several very delicious recipes copied via your voice through the Ether. I thank you for your radio visits to my home.

Mrs. A. L. B.
San Diego, Calif.

I have been a constant listener to your broadcasts and am so enthusiastic about the recipes you have given. Your recipes are certainly positively never-fail.

Mrs. M. R.
Arlington, Wash.

I do not often have the opportunity to listen to the radio in the morning, but today I have had the pleasure of listening to you and I was deeply impressed by your talk and I feel you must do a very great deal of good. For eleven years I have been manager, steward, housekeeper, etc., of a country club and am deeply interested in food—good food. We use pyrofax gas at the Club as we are fifty miles out in Westchester County.

Mrs. A. W. H.
New York, N. Y.

I've been married eighteen months and I have enjoyed your programs long before I was married. I was very much interested in Saturday's program. I do wish you would take the trouble of sending me the "Recipe for a Happy Married Life." I have been very happy so far but I do want to make sure I will keep it up. So having a written recipe before me at all times I am sure I won't go wrong.

Mrs. L. B. K.
Manchester, Conn.



The Mystery Chef, bidden from view in the unique compartment shown above, autographs his cookbook for customers of The Brooklyn Union Gas Company. Mrs. Mystery Chef and the two dogs, Sandy and White Rock, appear at the extreme right. More than 1,000 radio fans of the Chef were on hand to have their cookbooks autographed

I am a devoted listener to your radio programs and have copied many recipes and tried most of them with great success. I wish to thank you for them.

Mrs. G. C.
Priest River, Idaho.

I am a tourist here for the winter and have been intensely interested in your talks over radio. I live with my daughter in Hot Springs, Arkansas and we use gas both to cook and for refrigeration. We, like you, think nothing equals gas. I thank you for the enjoyment I have received from your broadcasts.

Mrs. A. W.
Hot Springs, Ark.

Not a day goes by since I have had your booklet that I have not made something from your leaflet. I have apples baking your way now. Thank you again and know that I am sincerely grateful to you and your broadcasts.

Mrs. W. F.
Washington, D. C.

This morning's broadcast was one of the finest bits of philosophy I've heard in a long time. Would it be possible to have a copy of your "Silver Wedding Anniversary" recipe? I would so like to pass it on to my minister. I can truly vouchsafe for the truth of every word although I still have sixteen years to go to reach the "Silver Day." It is so important to know the touch of the Master Hand in this most intimate of associations.

Mrs. E. T. A.
Rochester, N. Y.

A friend of mine purchased an oven control gas stove recently and I expect to get one like it in the near future when I hope to get your cook book.

Mrs. C. J.
Florence, N. J.

Your "Silver Anniversary" broadcast should be hung and framed in one's home. Should be hung in school rooms. It's the forerunner of advice to youth—something to look forward to and use as a rudder on life's voyage. We need such advice and it should be broadcast every so often.

Mrs. E. M. H.
Mahopac, N. Y.

Your Association—

What It Is *and* What It Offers

V

THE purposes of the five-point program of the American Gas Association Testing Laboratories are expressed in the constitution of the Association of which it is a part—"To promote and develop the gas industry to the end that it may serve to the fullest possible extent the best interests of the public." It serves these purposes through (1) developing and securing national acceptance for complete standards of construction and performance for all types of gas appliances and their accessories; (2) testing, certifying and annually inspecting gas appliances and their accessories; (3) conducting research investigations of all types for and in behalf of all phases of the industry; (4) providing for the use of manufacturers of appliances and other member interests of the Association, adequate and complete facilities for development, test and counsel; and (5) assisting in the educational endeavors of the industry through published material and direct instruction.

The history of the Laboratories is one of development and progress. Physically they have grown from the "borrowed space" they occupied in 1925, in the machine shop of the East Ohio Gas Company, to the two complete plants which house them today—the main structure at 1032 East 62nd Street, Cleveland, Ohio, and the Pacific Coast branch, or-

On May 1, 1925, R. M. Conner, then associated with the Portland Gas and Coke Company as supervisor of that organization's appliance testing laboratory, assumed the responsibility of organizing and directing the activities of the American Gas Association Testing Laboratories.

Mr. Conner was graduated from Oregon State College in 1915 with the degree of Bachelor of Science in Civil Engineering. Later he was awarded a professional degree in mechanical engineering by the same college. He is a member of Phi Kappa Phi and Tau Beta Phi and in May, 1937, was elected to Sigma Xi, national honorary scientific fraternity, in recognition of his ability and accomplishments in the fields of research and engineering.

After his graduation from college Mr. Conner spent ten years with the Portland Gas and Coke Company with the exception of a period during the World War when he served as artillery officer overseas. He served in the Transportation, Distribution and Utilization departments of the Portland Company. He was for a time manager of the company's meter and repair shop and later supervisor of the company's testing laboratory.

He represented the Pacific Coast Gas Association as its Research Engineer as member of the Technical Subcommittee on the Investigation of Gas Poisoning and Asphyxiation Resulting from the Use of Gas Heating Appliances in Los Angeles and the vicinity. In 1924 he was awarded the Gold Medal of the Pacific Coast Gas Association for significant service as chairman of the committee which drafted the important Gas Appliance Testing Code.



R. M. Conner

Mr. Conner has been active as a member of the Baltimore Gas Reference Committee and assisted in drawing up the Baltimore Gas Appliance Ordinance which has served as a model for similar ordinances in other cities for many years. He is active in the affairs of the American Society of Mechanical Engineers, the American Society for Testing Materials and the American Society of Heating and Ventilating Engineers.

Under Mr. Conner's direction the Laboratories have grown from their modest start of 1925 to the present day complete testing, certification and research agency of the American Gas Association.

ganized in 1930, at 718 Towne Avenue, Los Angeles. That the physical growth has been governed entirely by the constant and rapid expansion of the certification, testing and research activities is self-evident.

The work of the A. G. A. Approval Requirements Committee, which is a Sectional Committee, Project Z21, of the American Standards Association, has been so successful that the standards have been referred to as "the finest and most complete set of workable consumer standards that enjoy general application in the public's interest today." The fact that more than 90% of all gas appliances sold in the United States and Canada bear the Laboratory Seal of Approval, signifying

that they comply in every respect with these standards, is an indication of the efficiency and scope of the certification and testing program as carried on under the guidance of the Approval Requirements Committee. The recent action of that committee in adopting a ruling requiring the use of auxiliary tag and label forms of the Laboratories' Approval Seal on the front of all approved gas appliances is expected to do still more toward furthering the widespread acceptance of that program.

The A. G. A. Approval Requirements Committee is composed of six representatives of leading gas companies, seven ex-

ecutives of large gas appliance manufacturers from the United States and Canada, the director of the Testing Laboratories and representatives from the National Bureau of Standards, U. S. Bureau of Mines, U. S. Public Health Service, U. S. Bureau of Home Economics, the American Home Economics Association, Master Plumbers' Association, National Safety Council, Heating, Piping and Air Conditioning Contractors National Association, American Institute of Architects and Associated Factory Mutual Fire Insurance Companies. This group directs 284 national authorities and gas industry executives, organized into 34 requirements subcommittees, whose function it is to develop all standards and test pro-

cedures applied by the Laboratories in testing and certifying appliances and accessories. The standards cover every important aspect of construction and performance of the particular variety of gas appliance or appurtenances in question.

Services of the Laboratories are available to all branches of the industry at cost and every effort is made to keep that cost as low as possible. The cost of carrying out the Laboratories' equipment testing and certification program in recent years has amounted only to approximately 5¢ per approved appliance sold in the United States and Canada. To minimize the expense of testing such work is departmentalized according to classes of appliances with certain testing engineers assigned to each such department specializing in the testing of that particular type of equipment. Certificates of Approval or Listing issued when the appliance or accessory has met all requirements are valid for the remainder of that year. If the annual visit by Laboratories' inspectors shows that products are being manufactured according to requirements, certificates are renewable annually for a period of five years at which time the appliance must be submitted for re-testing.

Factory Inspections

Laboratories' inspectors travel between 60,000 and 75,000 miles annually, visiting the factories of each producer of certified goods, which extend from Montreal to Dallas. In addition to insuring that appliances are being manufactured exactly as were the models originally approved by the Laboratories and to extend certification for another year, it is the function of inspectors to assist manufacturers in every way, to extend certification from currently approved models to others sufficiently similar in design and construction, and to clarify the value of the approval program by conference with dealer and gas company officials. Inspectors are carefully routed to keep the expenses of such trips as low as possible. With the organization of the Pacific Coast Branch of the Laboratories in 1930, inspection costs for

the West Coast industry were reduced and better service in that section was made available than had theretofore been possible.

The advantages of a central agency for testing and research activities are obvious: It provides ideal facilities and trained personnel at the service of all member companies of the American Gas Association; it avoids duplication of effort on the part of individual gas companies and manufacturers by carrying on research investigations of mutual interest to a number of companies and making available to the entire industry the information and data resulting therefrom.

A. G. A. Research

Research at the Laboratories covers completely the many and varied phases of the gas industry's operations and includes such subjects as industrial gas research, investigation of gas savers, flue eliminators and devices, and attachable solid tops, comparison of gas and competitive fuels for domestic use, an investigation of pipe joints and a five and one-half year investigation of gas mixing.

The important and comprehensive investigation on Pipe Joints, extending over a period of five years, not only resulted in the development of complete standards for Bell-Joint Clamps and Mechanical Joints for Cast Iron Pipe, but also opened up a new field of equipment testing and certification for the Laboratories.

As a result of the investigation on gas mixing, the most complete scientific guide available on that subject, including three bulletins on mixed gases, has been placed at the disposal of the gas industry. The Laboratories have also acted as consultants to utilities companies in gas mixing problems, this service being available to them at cost.

A number of bulletins with extensive basic information on the application of gas to industrial processes has been made available to the industry as a result of the industrial gas research carried out under the supervision of the Committee on Industrial Gas Research, covering the elimination of burner noise in industrial gas burners and combustion systems, characteristics of burning gas

with preheated air, combustion space requirements for industrial gas furnaces, and the effects of operating temperatures on the combustion of industrial gas.

Domestic Gas Research is carried on at the Laboratories under the direction of the Committee on Domestic Gas Research which was organized in 1935. This committee is composed of several manufacturer members and the engineering executives of leading utility companies throughout the country. Current studies undertaken in this field cover the fundamentals of design and performance of gas ranges and gas water heaters. A bulletin on Domestic Gas Range Research published and distributed in 1936 resulted in greatly improved overall performance of many ranges, particularly in the maintaining of low oven temperatures, top burner efficiency and insulation.

The improvement of test equipment, precision instruments and technical apparatus for the accurate and complete engineering investigations carried on by the Association in Cleveland and Los Angeles and the development of several important new devices for specific purposes are other phases of the Laboratories' general program.

Aid to Manufacturers

The provision of facilities and expert counsel for manufacturers is one of the five important functions of the Association's Laboratories. Both the Cleveland and Los Angeles Laboratories have set aside test rooms and equipment for the use of visiting manufacturers in developing and conducting trial tests on appliances which will eventually be submitted to the Laboratories for approval.

The contribution of the Testing Laboratories to the educational efforts of the Association take the form of publication of research bulletins, technical reports and general literature, cooperation with schools, colleges, and universities, and instruction of home service representatives, service and installation men, plumbers, dealers, and homemakers.

General guidance of the Laboratories and their relation to the indus-

try and the Association is afforded by the Laboratories' Managing Committee which approves expansion programs, establishes fundamental policies for the operation of the Laboratories, sets fees for testing and inspection, and inspects the Laboratories annually.

The American Gas Association Testing Laboratories in serving as the technical agency of the gas industry in the development of standards, the testing and certifying of gas-burning appliances and conducting research activities, is fulfilling needs which have been evident since gas was first used in the home for purposes other than lighting, namely, that of eliminating from use gas appliances of inferior construction and performance. To the industry, the Laboratories' five-point program has meant a complete set of nationally accepted standards, approved as American Standard by the American Standards Association, for every type of domestic and commercial gas appliance and appliance accessory; has eliminated the addition of unsafe products in the field; provided better appliances from the standpoint of safety, efficiency, durability and flexibility; reduced production costs through standardization and concentration of effort; provided production and distribution data; afforded expert counsel and facilities for testing; provided rules for better installation and the more intelligent use of gas appliances; as well as, no doubt, improved public relations.

A wider variety of better, more usable appliances with modern designs, higher efficiencies and stronger architecture is the contribution of the

Laboratories to the gas-using public.

It may reasonably be expected that the American Gas Association Testing Laboratories will continue to

serve these and other purposes, as time goes on, in "the best interests of the American gas industry and of the public."

Henry M. Brundage Is Dead



H. M. Brundage

HENRY M. BRUNDAGE, former vice-president, Consolidated Edison Company of New York, Inc., died on July 17, at the age of 64, in the United Hospital, Port Chester, N. Y., after an illness of five months.

A native of White Plains, N. Y., at an early age Mr. Brundage had moved with his family to Port Chester, N. Y., where nearly a half century ago he made his start in the business world as an employee of the Abendroth Brothers Foundry. Reporting to work ahead of his fellows on his first job, he was called upon to ring the foundry bell at 6:55 A.M., daily, to start the plant's working day. His next position was with the People's, later the First National Bank of Mount Vernon, N. Y., with which he remained four years, working up to the position of paying teller.

A start in the utility business, which became his life work, followed on December 11, 1894, when he went to work in the general office of The Standard Gas Light Company, a predecessor of the Consolidated Edison Company of New York, Inc., at 71 Broadway, New York City. In 1901 he was transferred to the United Electric Light and Power Company, from which he was again transferred two years later to the Consolidated Gas Company, with which he remained until his retirement on December 11, 1934—just forty years after he started to work for the Consolidated System. He was successively accounting department chief clerk, controller, assistant

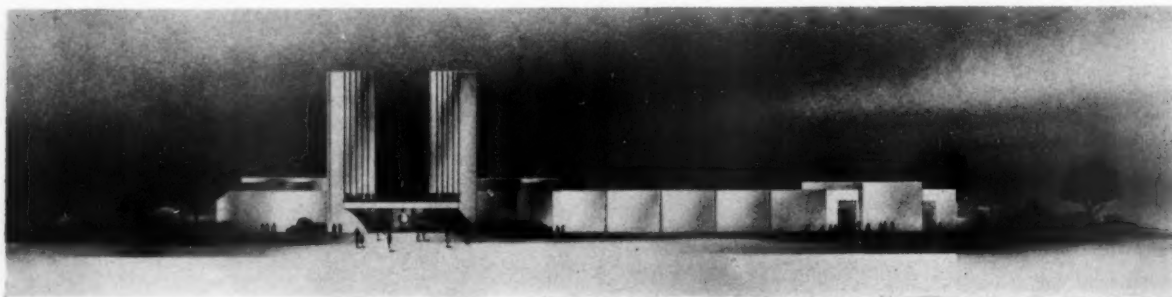
secretary, secretary, and for ten years vice-president of the company. All matters pertaining to accounting, auditing, insurance, taxation and related matters were within his jurisdiction.

A.G.A. Treasurer

During his forty years of service in the gas industry Mr. Brundage was identified with national, state and local public utility organizations. He was treasurer of the American Gas Association from 1920 to 1926 and president of the Empire State Gas and Electric Association in 1926. In the local field he was the founder and first president of the Society of Gas and Electric Accountants. He had been a member of the Society of Gas Lighting, the Illuminating Engineering Society and the National Electric Light Association. His work on a uniform classification of accounts for the utility industry was regarded as a major contribution to his chosen field.

At the time of his retirement, Mr. Brundage was vice-president, secretary of Board of Trustees and secretary of the Executive Committee of the Consolidated Gas Company; director in the Central Union Gas Company, New Amsterdam Gas Company, New York Carbide and Acetylene Company, Northern Union Gas Company and The Standard Gas Light Company; director and secretary of The Astoria Light, Heat and Power Company; vice-president and secretary of the Tarrytown Terminal Corporation; assistant secretary of the Westchester Lighting Company; and director and treasurer of Green Mountain Lake Farms, Inc.

He is survived by his widow, the former Jessie Bentley, two sons, Willis R. Brundage of Kingston, N. Y. and Henry M., Jr., of Washington, D. C., a brother, Edward Brundage of New York, and five grandchildren.



Proposed Gas Industry Building at New York World's Fair—1939

Home Service Today and Tomorrow



Elizabeth Sweeney

THE A. G. A. MONTHLY of May carried a quotation. It said, "Let us give our history a rest. The very fact that we have been active and successful for more than a century leads some people to assume that we are old-fashioned." The words are Sir David Milne-Watson's. The history of Home Service is such a brief and modest one that I think it can be mentioned without fear of inviting that stigma. There are few Home Service departments that are more than ten years old—15 years at the most. In 1930 there were only 325 companies having Home Service departments. Today, there are around 500, and more than 1,200 girls engaged in the work. Most of this increase has been in the last three years—which, to me, seems adequate proof of the value of the work.

Home Service Aims

The three aims of Home Service—To increase good public relations; to increase the sale of gas appliances; and to increase the sale of gas—have never changed. But the emphasis has shifted. Primarily, I think, every Home Service department concentrated on that first objective—to increase good public relations. Today, the emphasis has shifted to the sales and load building assistance Home Service can render.

There are many reasons for this. The intensive promotional program within the industry is one. The development of a new selling technique is another. We are all familiar with today's theory that we are no longer selling "things." We sell "advantages." If any one can name an arm of this industry better prepared than is Home Service to sell the advantages of gas cookery, gas re-

By **ELIZABETH SWEENEY**

Chairman, Home Service Committee

frigeration and gas water heating—I'll pause to listen.

Just how can we help sell these "advantages"? First, I think through demonstrations. That's only one way but I mention it first because I know that demonstrations have, in some quarters, been given a bad name—and, undeservedly. If there remains a company whose Home Service department has not adopted for its demonstration program, the sales-slanted demonstration of appliances rather than the old style food preparation demonstration, then the fault lies with that company. I think there can be no Home Service girl in the country who has not read about, listened to, or given sales-slanted demonstrations of appliances. Our Home Service Committee this year considered the universal demand for ways in which to dramatize so-called Cooking Schools, and with no strain whatever upon the imagination, and drawing only upon experiences of various gas companies throughout the country, 16 variations or ways of injecting drama into demonstration programs were found.

The question arises every now and again "Are Demonstrations Needed?"

Well, the gas industry has agreed that advertising is needed to the tune of a half million dollars—and unless I misunderstand this national advertising campaign of ours, its intent is to constantly remind the public of the modernity of gas appliances. Perhaps I should say "acquaint" rather than "remind." A survey made by Daniel Starch and Staff tells us that $\frac{1}{2}$ of the housewives in the country don't know that gas ranges are modern! Below are the questions asked thousands of women, probably most of whom are using gas, and their answers.

Public Uneducated

It's an appalling figure— $7\frac{1}{2}$ million women think electricity is better, because they *don't know about gas*. Whenever I hear a Home Service girl say that she can't believe it is necessary to recount at every demonstration, the story of the modern features of the range she is working with—or when a utility man calmly remarks that he is curtailing his demonstration program because the women in his community have all been reached many times over through demonstrations—I want to shout the evidence of these figures at them. You and I know that today's gas range has everything the electric ranges have, but $\frac{1}{2}$ our women customers

Question: Do new gas ranges have:

| | % Said Yes | % Don't Know |
|-----------------------------------|------------|--------------|
| Automatic lighting | 52 | 48 |
| Automatic oven heat control | 57 | 43 |
| Heavy oven insulation | 51 | 49 |
| Clock control | 50 | 50 |
| Simmer burners | 36 | 64 |

Question: How do Gas and Electric ranges compare in:

| | % Said Gas Best | % Said Electricity Best | % Said Same | % Said Don't Know |
|----------------------------|-----------------|-------------------------|-------------|-------------------|
| Speed of cooking | 56 | 15 | 11 | 18 |
| Coolness in cooking | 7 | 58 | 1 | 34 |
| Best cooking results | 8 | 45 | 8 | 39 |
| Cleanliness | 2 | 65 | 3 | 30 |
| Automatic controls | 0 | 28 | 18 | 54 |
| Best looking | 4 | 35 | 22 | 39 |

Address before A. G. A. New York—New Jersey Regional Gas Sales Conference, Rye, N. Y., June 10, 1937.

don't know. Advertise, to be sure! And, remember that the sales-slanted presentation of modern gas appliances through Home Service demonstration programs is advertising of the smartest kind.

Doubtless most of you are familiar with the information on "Why Women Buy Modern Gas Ranges" as described in a recent Interim Bulletin of the Commercial Section of the A. G. A. This was based on a survey made in Chicago by Peoples Gas Light and Coke Co. with several hundred recent purchasers of new gas ranges. Their findings were, substantially, those of the Starch survey. Women are not at all familiar with the many operating advantages of modern gas ranges. This was one obvious forced conclusion in the Chicago survey and the second was that if they *were* generally familiar with them, the resistance to gas range sales would be greatly reduced. Surely, in the light of such evidence we must agree that the sales-slanted demonstration of appliances should occupy a prominent place in Home Service programs.

Home Calls

How else can Home Service help sell the "advantages" of gas: Through our Home Call work.

The Home Service worker who is handling a customer range complaint call has an opportunity and an obligation to tell that customer about the features of new gas ranges. She can help her to make the best use of what she has, to be sure, but let's abandon the defensive attitude toward obsolete appliances and tell our customers about the new. Remember, half of them don't know!

And when Home Service girls are making the routine follow-up and instruction call they can be trained to take a promotional attitude, too. It is a fact that the woman who has just purchased a new appliance has become keenly kitchen-conscious. I remember a customer who had just bought a new refrigerator telling me that it "laughed at the rest of her kitchen." Here is a chance, through the use of that newest sales tool—"Kitchen Planning" to lead that customer on to a concrete desire for other modern appliances.

The gas industry was one of the pioneers in the field of Kitchen Planning. It isn't a very new thought to you, is it, but it has acquired a new significance because this sales tool which our industry has been talking about for the last five years has been adopted by our competitors—and how they are wielding it!

The A. G. A. Kitchen Modernization Committee is doing a splendid work in awakening the gas industry to the possibilities in this field. The material which Harry Swenson has been bombarding us with recently has contained practical, simplified suggestions suitable for adoption by any interested company. And, that should mean every gas company in the country. We must abandon the idea that Kitchen Planning must be a costly, an elaborate, operation.

Modernization Bureau

My own company is representative of the many companies serving several small cities and villages.* We have found that a Home Modernization Bureau is neither an unwieldly nor an impractical notion. And, it seems to me that the company failing to draft Home Service in this movement is making a mistake. We, in the gas industry, can look for little outside assistance. This is *our* problem, to be met and dealt with within our own companies. The task of educating our salesmen is in itself a huge one. They are not enthusiastic about this kitchen planning story because it sounds involved and complicated. They need information, simply but completely presented and I think your Home Service departments can teach them. Your competitors are recognizing that Home Service has its place in this work and, if it is of importance for the electric utility to make use of Home Service, in addition to all the service available from national manufacturers, how doubly important that we in the gas industry do, too.

I sometimes think we have been much too unromantic about this business of selling appliances. We have talked too much about our service getting women *out* of the kitchen. The average woman believes that she spends most of her time there, whether she does or not. She thinks she is a hard worker. Why argue with her? Let's

glorify this job of hers. Let's make her think that workshop of hers must be of the very best. And, let's not fail to understand what she wants in a kitchen. Here, once again, enters Home Service.

A short time ago I heard a man identified with the Kitchen Planning service of a large electric appliance manufacturer speak. He told us that we must educate our customers up to the standard of efficient kitchens. That there is no need for the family to use the kitchen as a dining center. That the bathroom is the place for the children to wash their hands before lunch. Well, I don't agree with him. If more than half the families in this country eat at least 14 meals a week in the kitchen,—and they do—let's not take time out to revolutionize their living habits. Let's plan for them the kitchen that fills their need. Let's make it such a comfortable, convenient and attractive spot that they will enjoy those 14 meals.

All this involves working with our sales departments and with our salesmen. It can and it should be done. It involves to some extent a revision of Home Service programs and of the average conception of what Home Service can do.

History May Repeat

But this industry has faced revisions before. We were once, so history tells us, lighting companies, but when we were forced to, we shifted our attention from lighting to the cooking field. Then we added the water heating load and along came house heating. When the old distribution system was taxed to capacity we had often to add to the main size and sometimes we found a new source of supply.

We may have to do this in Home Service. The average department is taxed to capacity now, but if these new fields are worth invading, we can add to the size of the Home Service departments if and when needed. I recall stating when I was on a sales program a year or two ago that one Home Service girl to every 5,000 customers was considered a desirable ratio in some companies. The statement aroused some discussion and disagreement. Today, one electric utility in this country employs 88 Home Service girls—one to every 2,000 meters and I heard recently that they are considering enlarging the staff. Too few workers in the average

* New York State Electric & Gas Corp., Geneva, N. Y.

Home Service department is the answer to many an executive's complaint of mediocre attainment.

An officer of one large gas company—an executive prominent in our industry, and a man with whom many of you have worked on committees—recently went on record as follows:

"I feel that there is a very definite trend to expanding Home Service activities. In attending three conferences within the past two months this subject has been brought up each time although the three groups were entirely different. I believe that the scope of the work handled by the Home Service departments is due to have considerable expansion, probably in Public Relations and even Employee Relations. Also I feel a tendency toward a breakdown in the New Business expenditures between obtaining new load, reclaiming lost load, retaining present load. Certainly Home Service offers the logical solution to the latter two breakdowns."

In that last sentence of his lies the justification for my belief that Home

Service, tomorrow, will be given new opportunities for usefulness. "Retaining present load and reclaiming lost load"—surely any department will grow, which can play a part in solving these two big problems of our business. I learned recently of a plan in progress in a New England company. A list was made of every address that has not had an active meter since August, 1936. After deleting from the list the obvious "deadwood," representing those locations which had been torn down, etc., they found 70% could be considered potential users. They assigned one man to the task of learning why gas was not now being used. He found the main reasons for these customers not returning are that they:

- 1—Purchased oil equipment,
- 2—Had a fear of gas because of small children,
- 3—That gas is too expensive,

4—Some conflict with the gas company in the past,

5—Electric ranges.

The first three represent the vast majority. This company reports: "We have been able to turn these cards over to the Sales Department and recovered some business. However, it has developed that a man is not the proper contact for this work and we feel that it would be much better to have it as a function of the Home Service Department. We are, at the present time, attempting to work it in their program."

There are several companies finding Home Service useful in a tie-in with the Commercial and Industrial Sales departments. In one instance, a bakery tempted to substitute a competitive fuel was saved and some test baking by the Home Service department played an important part.

(Continued on page 327)

Gas Exhibit at Home Economics Meeting



Exhibit of Kansas City Gas Company at the A.H.E.A. Convention

THE annual convention of the American Home Economics Association in Kansas City, Mo., June 21 to 24, had a registration of over 2,100, including teachers and students of Home Economics, hospital dietitians, social workers, home service directors and home economists in the business field.

A large array of educational exhibits was a feature of the meeting. One especially noteworthy was that of the Kansas City Gas Company, consisting of a five-section exhibit with the principal headings: "Gas Is Cooler," "Gas Is Cleaner" and "Gas Is Faster." The manufacturers of gas appliances cooperated with the gas company in

setting up this unusually attractive display. There was remarkably fine interest shown by those in attendance. One attendant at the exhibit was heard to remark, "This crowd asks more questions than any group I have ever seen at a convention; good sensible ones too, the kind of questions the whole gas industry ought to know more about."

The convention program was divided into many sections, with home service people being particularly interested in the sections of the Home Economics in Business group, Food and Nutrition, Institution Management and Housing. At a general sessions' program the subject of "The Growth of

Consumer Influence in the Retail Field" was effectively presented by Harold Brightman, chairman of the Merchandising Division of the National Retail Dry Goods Association, in which he outlined the progress that business was making in meeting the widespread interest in consumer buying problems.

The Gas Service Company of Kansas City entertained at a luncheon during the convention, complimentary to the home service directors from gas and electric companies in attendance. There were about fifty directors present. Betty Boyle, home service director of the company, presided as hostess.



Colorful, friendly, and with an Old World atmosphere, the kitchen of The American Home has modern scientific equipment and step-saving arrangements to bring it strictly up to date and make it convenient and workable for testing and photographing recipes and trying out new equipment



Even the casual observer notes at first glance that there is a place for everything within convenient reach of the worker in this gas-equipped kitchen at The Ladies Home Journal Workshop. The background is one of the new shades of red, with a few telling accessories of delphinium blue



A complete self-contained kitchen centering about gas equipment forms the western half of the Experimental Kitchen of McCall's Magazine. Here the floor plan illustrates the approved L-shaped kitchen. A vibrant shade of red, used with metal, contrasts brightly with the white equipment



Here is a pictorial tour of
of the country's leading
showing gas equipment
for recipe testing and



A busy place is this Tasting-Testing Kitchen of Better Homes and Gardens at Des Moines, Iowa, where well over 200 recipes are tested every month. This scene showing a large gas range is proof that the kitchen is equipped for speed and action



A newly installed kitchen at Good Housekeeping Institute, equipped with gas range and gas refrigerator. This is one of several kitchens the Institute has for testing foods and equipment, and for developing menus, recipes and cooking methods



This newest of magazine kitchens at Pictorial Review-Delineator, where all kitchen tests are made, shows a white modern gas range and white cabinets in a setting of apricot painted walls. The accenting note in trimming and accessories is delphinium blue

Modern gas equipment as arranged in one of the kitchen centers of the Home Service Center, Woman's Home Companion. Here shades of blue create a striking background for the white equipment and illustrate that this is a very pleasant and liveable color.



rial of the kitchens of seven
y's leading women's magazines,
equipment and accessories used
testing and other purposes.

Evaluating Natural Gas Companies*

By PAUL R. TAYLOR

Stone & Webster Service Corp., New York

THE soundness of the security behind the senior obligations of well organized and operated companies in the business of producing, transporting and distributing natural gas has been understood for many years by large numbers of investors. While this group has steadily grown, there are still some who continue to think of the natural gas business as it was in the early days of prospecting.

Companies Classified

The term "natural gas company" is extremely broad. It includes companies carrying on different phases of the business, some of which are more speculative than others. A study of these, from the initial work of production to the final activities concerned with retail marketing, indicates that natural gas companies may be classified about as follows:

1. Companies which sell in the producing fields gas taken from their own wells or under contract from others.
2. Companies which transport to a wholesale market gas taken from their own wells or purchased from others.
3. Companies which transport to and distribute in various markets gas taken from their own wells or purchased from others.
4. Companies which distribute to industrial, domestic and other users gas purchased from companies in group 2.

Of the factors which are of help in determining the investment rating of the securities of any natural gas company, some are more important to companies in one classification than in another. The necessity for an adequate supply including ample reserves of gas is common to all.

Natural gas is produced either in the presence of oil or from wells in which there are no indications of oil.

In order that oil may be produced constantly and in paying quantities from a well where gas is present, it is necessary that definite quantities of the gas be taken regularly. On the other hand, gas which is produced from wells containing no oil can be taken at will. The most desirable source probably would be a dry gas field protected against drainage by control of the remainder of the area under long term leases. Adding to the control of such areas contracts for casing-head gas from oil wells is also desirable, as the latter when obtainable is usually priced lower than dry gas. When the entire supply is obtained from oil wells, the situation is apt to be unfavorable as, generally, the life of such wells is relatively short, and the company taking the gas must enjoy a high load factor in order to utilize fully and regularly the available gas.

Gas Reserves

One might think that companies in group 2 should own sufficient reserves to cover all their requirements and should develop them only as rapidly as the market requires. It is very costly, however, to carry proven reserves over a long period of years. The investment in proven reserves is high and the capitalized cost of lease rentals on undeveloped acreage mounts rapidly. Usually it is desirable to have some of the proven acreage in the hands of other producers who are interested only in selling gas in the field.

It is obvious that if a natural gas project is to appear attractive, the extent of the reserves must be definitely established and be sufficient to permit the amortization and retirement of the investment before they are exhausted. Accurate estimates of the size of reserves can be secured from reliable geologists. It is also important that they be controlled in such a manner that they will be continuously available to the company without danger of

drainage by competing producers. The cost of procuring gas from these reserves can be ascertained, since drilling costs are generally known. In cases where large amounts of gas are purchased, it is important to ascertain whether the purchase contracts are with dependable producers and firm for a considerable length of time at reasonable prices.

The pipe line system for transporting the gas is an important consideration when examining companies in groups 2 and 3. It is, of course, a product of engineering. Careful design, including the proper spacing of compressor stations, is necessary in order to assure adequate capacity for the future. If construction has been properly supervised, losses through leakage and maintenance charges are minimized.

Natural Gas Market

The market for natural gas is extremely broad, being limited only by the relative price of competing fuels. Competition from coal and oil in some localities may force the price of gas so low as to show little profit after meeting production and transportation costs, and make it impossible to supply industrial users at a profit. If much of the gas is sold to industrial plants or to distributors whose principal customers are industrial plants, gross earnings may fluctuate widely with the business cycle. A well diversified market with a generous portion of the gas taken by commercial and residential users enhances the prospects for a well sustained level of gross earnings.

The market of companies in groups 3 and 4 frequently enjoys a measure of protection through state laws providing that companies distributing a utility product such as gas must secure proper "certificates of convenience and necessity" from their State Regulatory Commissions. Long term and broad franchises are desirable wherever possible, but it does not always follow that the lack of a desirable franchise is objectionable. Well informed investors would hesitate to risk any amount of

* Reprinted from Stone & Webster Bulletin, June, 1937.

capital in a new system that sought to compete with an existing company, even though the latter might have no satisfactory franchise.

The valuation of a property is of particular importance when examining its capitalization and considering the return which it can earn. Valuations determined by reputable engineers are entirely dependable. In examining companies falling in groups 3 and 4, it is important to note if equipment neither used nor useful in the operation of the property has been segregated. This is pertinent to companies which have changed from artificial to natural gas and have not completed the retirement of manufacturing plants no longer useful.

Rates

The price obtained for gas by companies in the different classifications varies widely. Rates established by companies in group 1 are determined generally by the cost of producing the gas. In areas where gas is at shallow depths in large quantities, the rate should be less than in areas where the wells are small or relatively much deeper. Companies in group 2 should establish reasonable rates for gas delivered at city gates for distribution by companies in the 4th group. The continued prosperity of the former is dependent upon the latter's ability to sell gas in large quantities at a satisfactory profit. The contract arrangements between such companies must be carefully examined when determining the prospects for companies in either group. Companies in groups 3 and 4 usually are subject to the supervision of public service commissions. In recent years most of them have established promotional rates which have increased the sale of gas, and which have received the approval of the public and of the regulatory commissions.

Provisions for property retirement and depletion of gas reserves should be generous, especially in the case of depletion, since nature is not replacing the product taken from the ground. There is no reason for not setting up a reserve covering the intangible cost of securing the company's own production that will completely retire such costs when the life of the field is ended.

The natural gas business has become less speculative in the past few years due to the improvement of geologic technique and the discovery of enormous quantities of gas. With the establishment of the industry on a sound basis, there is a trend on the part of State commissions toward strict regulation of the return on the property investment. Federal regulation of those companies whose operations are interstate may be imposed in the near future if legislation now pending before Congress is enacted. As the speculative possibilities of the business pass, a necessary change occurs in management. Matters of operation, finance, taxes, public relations, and sales policies are placed in the hands of specialists to insure well guided and efficient administration. Management is a vital consideration when determining the merit of investment in this field.

Odorization of Gas Started in Texas

ODORIZATION of natural gas in the 300 towns served by the Lone Star Gas Company was started late in July by company engineers, in accordance with a law passed by the Texas Legislature. The odorant was introduced into Lone Star's main line at Gordon on July 26 and on the following day at Trinidad. The entire project was scheduled to be completed in less than a month, with the odorant to be introduced at Chillicothe, and Fox and Hollis, Oklahoma, and a number of intermediate pipe line points. From these points the odorant travels to the various towns and cities over the system.

Order Issued

Lone Star engineers pointed out that the odorant is used only to permit the detection of leaks; it does not create a hazard, and has no effect on the usefulness of gas as a fuel. When the gas is burned, no odor is noticeable, and it gives off no nauseating fumes nor any gas injurious to clothing, rugs, drapes or furniture.

To some persons the odorant smells like fumes from a refinery, to others like burning rubber, but it is distinctly noticeable if a leak in a line exists or if a cock or burner is left open and unlighted.

The Texas Railroad Commission on July 27 issued its order promulgating rules for injection of malodorants in gas sold for private and commercial use. Lone Star began its odorization project prior to issuance of the order to have the work completed before the fall and winter demand for gas starts, officials pointed out.

The order directs that the malodorant used shall be harmless and neither toxic

nor nauseating, non-corrosive to steel, iron, brass, bronze or leather, and insoluble in water. No specific type of the malodorant agent is specified but when introduced into liquefied petroleum gas must be of such distinctive odor as to indicate the presence of gas in concentrations not greater than one-half of 1 per cent by volume, and in natural gas to indicate the presence of concentrations not greater than 1 per cent by volume.

Advertisements advising customers that the company was to odorize its gas appeared in newspapers over the system. The advertisements pointed out that consumers should call their plumbers in case of a leak in piping or connections. Many newspapers over the system carried articles announcing the odorization project.

—Blue Blaze News

Natural Gas Veteran Resigns Post



H.L. MONTGOMERY, who was affiliated with the Gas Service Company properties for many years, has resigned as president and a director of the American Pipe Line Company due to ill health.

H. L. Montgomery

Mr. Montgomery is a veteran in the gas business, having started in 1905 at Denver, Colo., with the Denver Gas & Electric Co. After holding positions with utility companies in Auburn, N. Y., Newark, Ohio, and Atlantic City, N. J., he was appointed in 1919 new business manager of the natural gas properties of The Empire Companies with headquarters in Bartlesville.

In 1920 he was elected manager of the natural gas division. In 1925 he was made manager of the Cities Service Gas Company which position he held until 1935 when he became president of the American Pipe Line Company.

For many years he was active in the operation of the Natural Gas Department of the American Gas Association as well as being closely identified with the Oklahoma Utilities Association.

Joins Standard Gas

H.ENRY J. SWEENEY has joined the Standard Gas Equipment Corporation, covering the territory of Washington, D. C., Virginia, and parts of West Virginia and Maryland.

Mr. Sweeney has had long experience in the gas range business, and for several years was sales supervisor for Consolidated Gas & Electric Light & Power Co., of Baltimore, Maryland.

Australia's "Progress House" Uses Gas

EQUIPPED with gas air conditioning plant, an American gas range and a gas water heater, "Progress House" in Melbourne, Australia, has attracted thousands of visitors since it was opened last October. Sponsored as an advertising venture by Melbourne's leading department store, The Myer Emporium, Ltd., the house was built on a former parking area, alongside the store, facing a main thoroughfare and flanked by high buildings. While the house is not likely to be permanently located on the site, it was built as it would have been built for the permanent residence of some suburbanite, according to W. B. Edwards of the Colonial Gas Association.

The kitchen is laid out on modern lines, with working space around the walls. The gas range is an American model with time and temperature controls, and automatic lighting. An instantaneous type water heater fits snugly into the kitchen cupboards. Fresh air—warmed or cooled according to the season—is carried into the whole house through grills at floor level.

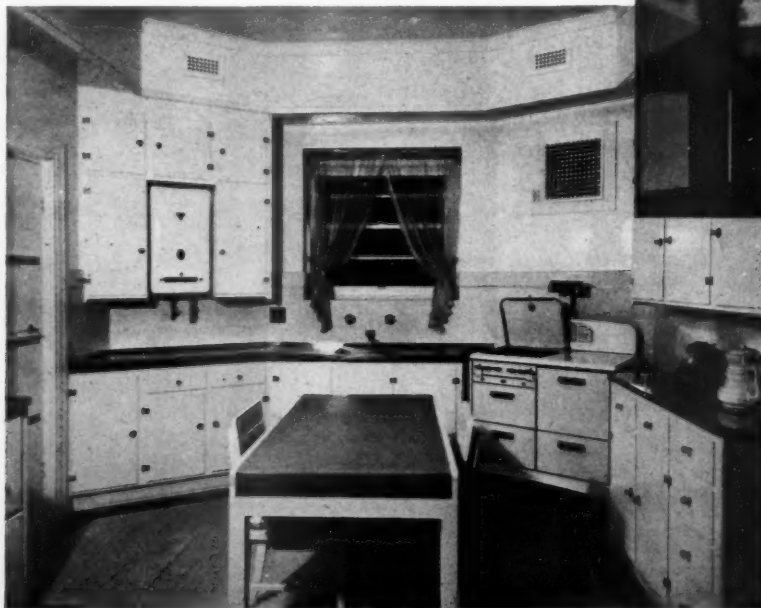
The house is a unique advertisement not alone for gas and gas appliances, but for a whole range of domestic needs.



Above—Progress House, Melbourne, Australia. Note the attractive garden which "grew" overnight



Through the vent below the waxed walnut ball table, shown above, comes air that has been warmed and filtered by the gas air conditioning unit. Every room is provided with a vent, and the temperature is automatically controlled from one single point



The kitchen, equipped with American gas range and instantaneous gas water heater (surrounded by cupboards at left)

Personal and Otherwise

Farnsworth Heads Boston Consolidated Gas Co.



E. M. Farnsworth, Jr.

ELECTION of E. M. Farnsworth, Jr., as president of the Boston Consolidated Gas Company was announced recently by the board of directors. Dana D. Barnum, who has been president since 1917, has resigned, and will devote his time in future to consultation work for the

Boston and other gas utilities. Mr. Farnsworth's duties become effective Sept. 1.

Mr. Farnsworth has been vice-president and general manager of the Boston Consolidated Gas Company since 1934. He is also president of the Old Colony Gas Company, offices of which are in Braintree, Mass. As a graduate engineer he joined the Old Colony in 1911, after a period associated with Stone & Webster. He played an important part during the next 25 years in the development of the Old Colony Company, including extension of its service to Cohasset, Hull and other towns on the Massachusetts South Shore, and became a recognized authority in gas service operation.

He was elected president of the Old Colony in 1929, shortly after it was purchased by Eastern Gas & Fuel Associates. Outside of the gas business, his chief hobby is sailing small boats.

Mr. Barnum has spent nearly a lifetime in the manufactured gas industry, and for many years was president of the Worcester Gas Light Company. He has served as president of the American Gas Association, and is now head of the American Standards Association.

A. J. Maloney Advanced

PPROMOTION of A. J. Maloney from the position of assistant to the general sales manager to retail sales manager was announced recently by H. M. Brundage, Jr., general sales manager of the Washington Gas Light Company, Washington, D. C. The promotion became effective July 1, 1937.

Mr. Maloney will be in direct charge of sales at retail of all domestic appliances, supervising the activities of the house heating and refrigeration division, the range and water heater division, the sales floor and the general clerical staff.

Joining the new business department of the Washington company on November 1,

1931 as field salesman, Mr. Maloney later served successively as supervisor of the sales floor, supervisor of the range and water heater division and assistant to Mr. Brundage, before his present promotion.

H. K. Wrench To Manage Minneapolis Co.

HARRY K. WRENCH has been appointed vice-president and general manager of the Minneapolis Gas Light Company, Minneapolis, Minn., succeeding John K. Swanson, who resigned July 1. Mr. Wrench, who has been vice-president and general manager of the Jacksonville Gas Company, Jacksonville, Fla., since 1935, takes over his new post Sept. 1.

He is a graduate of Michigan State College and has been connected with gas properties during his entire business career. Prior to going to Jacksonville, he had been president and general manager of the Lowell Gas Light Company, Lowell, Mass.

Elected Vice-President of Atlantic States Company



Col. Burrell

THE election of Col. George A. Burrell, well-known gas engineer, to the vice-presidency of Atlantic States Gas Co. Inc., has just been announced from the company's offices at 50 Broadway, New York City.

Among gas engineers, Col. Burrell is known as the scientist who discovered the rich helium reserves near Petrolea, Texas, during the World War, as the inventor of the Burrell standard fireman's gas mask, and as co-inventor of the Burrell-Oberfell process for extracting gasoline from natural gas by the charcoal process. He spent 1930 and 1931 in Russia helping direct modernization of that country's natural gas industry.

and the Burrell-Mase Engineering Co., Pittsburgh.

In conjunction with the announcement of Col. Burrell's election to its vice-presidency, Atlantic States Gas also announced a contract to supply liquefied gas for fuel for the rotary lime kiln at the plant of the Chemical Lime Co., Bellefonte, Pa.

Col. Burrell holds the distinguished service medal from the U. S. Government, the Lamme medal for attainments in engineering from Ohio State University, his alma mater; and an honorary doctorate of science from Wesleyan University, Middletown, Conn.

Joins Southern California Gas Company



A. F. Rice

APPOINTMENT of A. F. Rice as manager of Market Development of the Southern California Gas Company, with headquarters in Los Angeles, has been made public in an official announcement by A. B. Macbeth, president of the company.

Mr. Rice, who brings to his present position a well-rounded experience in manufacturing, wholesaling and retailing gas appliances, will be concerned with the formulation of cooperative sales policies conducted by gas appliance dealers, manufacturers and the Southern California Gas Company, under the supervision of F. M. Banks, vice-president in charge of sales.

His first entry in the home appliance industry was as a representative of Cribben & Sexton Company of Chicago, in California. In 1924, while still retaining representation of Cribben & Sexton, Mr. Rice became manager of the Sunset Stove Stores, and also the sales manager of Western Stove Company at Culver City. In 1925 he resigned the other interests and devoted his full time to the management of the Western Stove Company.

In 1926 he joined the H. R. Basford Company of San Francisco as sales manager, which operates a wholesale and retail gas appliance business. In 1936 Mr. Rice became western district manager of the Kelvinator Corporation of Detroit, Michigan, having charge of California, Arizona, and Nevada.

Useful Messages

"Hot Stuff This Gas" is the message carried in giant letters on a Timaru, Australia, gas holder, while another holder at Greymouth says—"Your Gas, Use It."

Harold Massey Appointed General Sales Manager



Harold Massey

WILLIAM T. RASCH, president of American Gas Products Corporation, has announced the appointment of Harold Massey, to the position of general manager of sales, a position left vacant by the sudden death of H. H. Dugdale, vice-president.

Mr. Massey has been working hand in hand with Mr. Dugdale for several years and has had a seasoned and varied sales and engineering experience. He entered the gas industry in 1923 upon his graduation from Stevens Institute of Technology when he became associated with the old William M. Crane Company in the Manufacturing Department. Later, when William M. Crane Company merged with and became The Standard Gas Equipment Corporation, he became Manager of the Designing and Engineering Department.

In 1930 he entered the employ of the American Radiator Company Manufacturing Department as designer of gas appliances. He was transferred later to American Gas Products Corporation as sales engineer when that company became a part of the American Radiator & Standard Sanitary Corporation. In 1936 he was appointed assistant sales manager of American Gas Products Corporation.

New ASA Standard for Accident Statistics

THE latest and best practice in the standardization of accident statistics is contained in the new American Standard Method of Compiling Industrial Injury Rates which was approved this year by the American Standards Association and is now offered to industry. The product of four years of intensive study by a committee of experts representing industry, labor and insurance groups, this work supplements the standardization of safety codes in which the ASA has been engaged.

Under the supervision of the International Association of Industrial Accident Boards and Commissions, the National Council on Compensation Insurance and the National Safety Council, this representative committee agreed on a fundamental change in the basis on which accident statistics are compiled, substituting disability for lost-time as the criterion and recognizing temporary partial disability.

The committee was headed by Leonard W. Hatch, International Association of Industrial Accident Boards and Commis-

sions, chairman, with Cyril Ainsworth, American Standards Association, acting as secretary. The American Gas Association was represented by E. P. Durfee and James B. Douglas.

Copies of the new standard are available at the following prices:

| | |
|--------------------|--------------|
| 1 to 9 copies— | 20¢ per copy |
| 10 to 24 copies— | 15¢ per copy |
| 25 to 99 copies— | 12¢ per copy |
| 100 to 249 copies— | 10¢ per copy |
| 250 to 499 copies— | 8¢ per copy |
| 500 and over— | 6¢ per copy |

All orders should be addressed to: American Standards Association, 29 West 39th Street, New York, N. Y.

Gas Institute at North Carolina College

THE Chemical Engineering Department and the College Extension Division of the North Carolina State College at Raleigh, North Carolina, are sponsoring an Institute for Gas Plant Operators to be held at Raleigh, September 7 and 8. The purpose of the Institute is to make it possible for those interested in the manufacture and sale of gas to meet for a period of study and discussion of their common problems.

The facilities of the Chemical Engineering Department have been placed at the disposal of the group and an instructive program, covering a wide variety of subjects, has been arranged. Included on the program is the A. G. A.-sponsored film, "The House

That Jack Built," and papers by representatives of a number of gas operating companies. Faculty members in charge are: J. W. Harrelson, Dean of Administration; Blake R. Van Leer, Dean of Engineering; E. E. Randolph, Professor of Chemical Engineering, and Edward W. Ruggles, Director, College Extension Division.

A cordial invitation to members of the gas industry to attend the Institute has been extended by the college. Further information may be obtained by writing to Edward W. Ruggles, Director, College Extension Division, State College Station, Raleigh.

"Health Protection of Welders"

THE industrial health section of the Metropolitan Life Insurance Company has issued a pamphlet, "Health Protection of Welders" which should have wide interest among gas engineers engaged in welding.

The pamphlet discusses the possible effects of gases, of metal fumes, and of light and heat rays upon the health of workers engaged in welding operations, and outlines the hazards to which they are exposed, with suggestions for their protection. It includes gas welding and cutting and welding with an electric arc.

Copies may be obtained from the Metropolitan Life Insurance Company, 1 Madison Ave., New York, N. Y.

Old Gas Bill Resurrected

NOTE—From April to October, 8 o'clock, A. M., to 5 o'clock, P. M.—From October to April, 9 o'clock, A. M., to 4 o'clock, P. M.
OFFICE—Green Street, between Third and Fourth.

Mr. N. Green July 1 1856

LOUISVILLE GAS COMPANY, Dr.

State of Meter on this day, 11100

Last Settlement, 97.15

For 1401

fed Gas, at \$3 per 1000, \$ 4.20

Received Payment, *Troutman*

IF ALL THE BILLS paid within three days from date, five per cent. discount on the whole bill, may be taken. All bills must be paid within ten days from date, the face of the bill to be stamped with the date paid.

IF Please protect your Meter from Frost by covering it with any Wrapper or Cloth.

Metric & American, Inc., London.

AN eighty year old bill for gas service recently came into the possession of T. B. Wilson, president of Louisville Gas and Electric Company. The date of the bill is July 1, 1856, the customer's name is N. Green, and the gas rate is specified as \$3 per thousand cubic feet.

A notation at the bottom of the bill reads: "Please protect your Meter from Frost by covering it with any Wrapper or Cloth."

Office hours, according to the bill, were from 8 A.M. to 5 P.M. in the summer and from 9 to 4 o'clock in the winter; consequently the predecessor company, because of the fact that little artificial illumination was used and people could not find their way about the streets after dark, reversed the policy of the present company which is to maintain longer office hours in winter than in summer.

Affiliated Association Activities

P. C. G. A. Elects New Officers



Norman R. McKee
President



H. L. Farrar
Vice-President



C. R. Graham
Chairman of
Mfrs. Section



Addison B. Day
Director

AS this issue of the MONTHLY goes to press the Pacific Coast Gas Association is concluding its forty-fourth annual convention in Seattle, Washington, with a large number of gas men in attendance. The final session of the three-day meeting was held August 19.

Norman R. McKee, vice-president in charge of sales, Southern Counties Gas Company, Los Angeles, was elected president at the first session. Other officers elected were: H. L. Farrar, president, Coast Counties Gas and Electric Co. and the Natural Gas Corporation of California, San Francisco, vice-president, and D. G. Martin, general auditor, Pacific Gas and Electric Co., San Francisco, treasurer. Clifford Johnstone is managing director.

New directors are: E. H. Coe, president, Central Arizona Light and Power Co., Phoenix; Addison B. Day, chairman of the board, Southern California Gas Company, Los Angeles; L. M. Klauber, vice-president, San Diego Consolidated Gas and Electric Co.; W. G. Vincent, Jr., vice-president, Pacific Coast Gas and Electric Co.; John J. Winn, Jr., commercial manager, Portland Gas and Coke Company. Outgoing president, James F. Pollard, of Seattle, is automatically a member of the board.

C. R. Graham, secretary, James Graham Manufacturing Company, Newark, Calif., was elected to the chairmanship of the Manufacturers' Section. He continues as a member of the board of directors and also as representative of the P.C.G.A. on the board of the A.G.A.E.M. R. G. Logue, Ward Heater Co., was elected vice-chairman of the section.

New England Gas Association

THE next meeting of the Operating Division of the New England Gas Association will be held at the Hotel Bond, Hartford, on the evening of Friday, October 22, and the morning of

Saturday, October 23. The production session will be held on Friday evening and the distribution session Saturday morning.

The next meeting of the sales division will be held at the Hotel Bradford, Boston, on Friday evening, October 8. It will be a range meeting.

Empire State Gas and Electric Association

THE Empire State Gas and Electric Association will hold its 32nd annual convention at Saranac Inn on September 16 and 17. Company officials and outside speakers will address the meeting.

Herman Russell, president of the American Gas Association, and W. C. Kellogg, president of the Edison Electric Institute, are scheduled to speak.

Taxation, Labor Relations, Competition and many other timely and important subjects will be discussed by leaders in these fields.

Business sessions are planned for each of two mornings, with the afternoons devoted to golf, tennis, boating and other forms of recreation.

Wisconsin Utilities Association

THE Accounting Section of the Wisconsin Utilities Association will again hold its annual meeting at Lawsonia, Green Lake, on September 24 and 25. The convention site was unanimously chosen by the committee chairmen because of the satisfaction expressed by those in attendance there last year. John I. Allen is chairman of the Section.

Fred S. Hunt, chairman of the Wisconsin Public Service Commission, will be a speaker at the meeting. It is also planned to have two nationally known utility men discuss the broad outlook for the industry. The program will be rounded out by valuable committee reports, which will be summarized for the convention, and important discussions of timely subjects.

Sessions will begin Friday morning and will continue to noon on Saturday. A golf contest in the afternoon will bring the conference to a close.

Convention Calendar

SEPTEMBER

- 6-10 American Chemical Society
Rochester, N. Y.
- 16-17 Empire State Gas & Electric Association
Saranac Inn, Saranac, N. Y.
- 17-18 Public Utilities Association of West Virginia
Greenbrier Hotel, White Sulphur Springs, W. Va.
- 19-23 American Transit Association
The Greenbrier Hotel, White Sulphur Springs, W. Va.
- 23-25 American Trade Association Executives
French Lick Springs Hotel, French Lick, Ind.
- 24-25 Accounting Section—Wisconsin Utilities Association
Lawsonia Hotel, Green Lake, Wis.
- 27 Association of Gas Appliance & Equipment Manufacturers
Hotel Statler, Cleveland, Ohio
- 27 National Bottled Gas Association
Cleveland, Ohio
- 27-Oct. 1 AMERICAN GAS ASSOCIATION
Cleveland, Ohio

OCTOBER

- 4-8 National Restaurant Exposition*
Chicago, Ill.
- 11-15 National Safety Council
Kansas City, Mo.
- 18-21 American Society for Metals
Atlantic City, N. J.
- 18-23 American Dietetic Association
John Marshall Hotel, Richmond, Va.

NOVEMBER

- 9-12 American Petroleum Institute
Stevens Hotel, Chicago, Ill.
- 10-13 17th Annual Gas School Conference
Iowa State College, Ames, Iowa.

DECEMBER

- 6-7 National Industrial Council
Waldorf Astoria Hotel, New York, N. Y.
- 8-9 National Association of Manufacturers
Waldorf Astoria Hotel, New York, N. Y.

* Includes exhibit sponsored by A. G. A. Industrial Gas Section.

Revised House Heating Booklet Offered

THE third and completely revised edition of "Helpful Suggestions on Home Heating with Gas" has just been published by the Mid-West Gas Association. With 24 pages, illustrated with 19 descriptive color cuts, the booklet contains many suggestions on how to protect against excessive waste of heat through improper home construction, poor circulation, etc. It explains the relationship between humidity control and heating comfort. Technical terms have been eliminated wherever possible, and the process by which gas heats the home is explained in simple, understandable terms. It is well designed for distribution to prospective gas house heating customers.

These attractive booklets are offered to gas companies at 8½ cents a copy by the Mid-West Gas Association. Sample copies will be mailed upon request to R. B. Searling, secretary-treasurer, 302 Utilities Building, Sioux City, Iowa. Over 25,000 copies of previous editions have been distributed.

Room Exhibits Opposed

THE following resolution has been adopted by the Board of Directors of the Association of Gas Appliance and Equipment Manufacturers:

"WHEREAS, it is considered not to be in the best interests of the conduct of a convention, for manufacturers to have displays of their products in their hotel rooms, and

"WHEREAS, the expense of such displays generally far exceeds the possible benefits,

"BE IT RESOLVED that the Association of Gas Appliance and Equipment Manufacturers is not in favor of manufacturers conducting such room exhibits at any meetings or conventions of the American Gas Association, or its affiliated associations, and

"BE IT FURTHER RESOLVED that the members of the Association of Gas Appliance and Equipment Manufacturers will use all their influence and effort to carry out the intent of this resolution."

World Power Conference

THE International Executive Council of the World Power Conference met in the offices of the French National Committee, in Paris, Sir Harold Hartley, C.B.E., F.R.S., the chairman of the council, presiding. It was decided unanimously to accept the invitation of the Austrian National Committee to hold a Sectional Meeting in Vienna at the end of August and beginning of September, 1938.

Consideration was given to the Second Chemical Engineering Congress of the World Power Conference, to be held in Berlin in 1940. The First Chemical Engineering Congress of the World Power Conference took place in London in June, 1936, under the patronage of H. R. H., the

Duke of Kent, and the presidency of Viscount Leverhulme.

An invitation was received from the Japanese National Committee for the Fourth Plenary Meeting of the World Power Conference to be held in Tokyo in 1942. The International Executive Council unanimously and enthusiastically accepted the Japanese invitation for 1942.

H. H. Dugdale Dies

H. H. DUGDALE, vice-president in charge of sales, American Gas Products Corp., died on July 19 in Manhattan General Hospital, New York City.

Before entering the gas industry, Mr. Dugdale was superintendent of production and afterward sales manager of Briggs & Stratton, a manufacturing firm in the automobile industry.

In 1924 he joined the staff of A. H. Wolff Gas Radiator Co., predecessor of American Gas Products Corp., in Chicago. A short time later he was made assistant sales manager and, finally, sales manager of American Gas Products, a position he held for 10 years. In February, 1936, he was made vice-president in charge of sales.

"Hello Honey" Sign Gets Results

JUST in case you were one of the many this summer who were greeted by a "Hello Honey" sign on the windshield of a passing automobile especially in the Mid-West, you will be interested in the explanation that this was a novel promotion contest sponsored by the Minneapolis-Honeywell Regulator Company in Minneapolis, Minnesota.

Employees of Minneapolis-Honeywell were awarded prizes based on the longest distance away any two of them met while vacationing from Minneapolis. The employees were able to distinguish a fellow-workman by the "Hello Honey" sign on the windshield of his car.

Medora Miller and Jean Whited grabbed off first prize money by meeting each other in Los Angeles, California, after 2,193 miles of travel.

This novel promotion scheme not only livened up the employees' vacation trips but proved to be a valuable publicity source for the company, because if you looked closer you would have noticed that the entire windshield poster read, "Hello Honeywell"—the "well" in smaller letters.

Indiana Association Holds Gas House Heating Conference



Group photographed at Indiana sales conference

MORE than 160 Indiana gas home heating salesmen and gas company officials looked, listened and learned at Indianapolis, June 30, when the Indiana Gas Association home heating division held its state-wide sales conference.

"How To Make Sales Presentations Stay Presented," a motion picture sound film, was the highlight of the day's meeting. The picture is designed to overcome the four negative mental attitudes the average prospect reaches during a sales presentation. It resolves a good sales presentation into a four-step formula: (1) Ho-Hum; (2) Why Bring That Up?; (3) For Example?; and (4) So What?

A dramatized presentation of "Telephone Technique and Its Effect on Sales" illustrated a more effective use of the

telephone for gas home heating salesmen.

Surface Combustion Corporation's new sound-slide film "Life As You Would Have It" rounded out the "triple bill." The program also included talks and discussion of home heating problems by manufacturers representatives and gas company officials.

Arrangements for the sales conference were made by Fred G. Rastenburg, Homer Hull and Ed Demlow, all of the Citizens Gas and Coke Utility, and Don Alfred of the Public Service Company of Indiana.

Other utilities represented at the meeting were Gary Heat, Light and Water Company, Southern Indiana Gas and Electric Company, Central Indiana Gas Company and Northern Indiana Public Service Company.

Accounting Section

Herbert E. Cliff, Chairman

H. W. Hartman, Secretary

E. J. Tucker, Vice-Chairman

The Economy Purchase Plan for Financing Appliance Sales

ABOUT four years ago several utility and finance company officials developed and installed a plan of financing dealers' sales of appliances that was, from a credit standpoint, based primarily upon the credit of the purchaser. It has proved attractive to large dealers with other good credit connections; has been received with open arms by small dealers with limited credit rating; has provided low finance charges and convenient payment facilities for purchasers of appliances; and has promoted a steady stream of appliances into customers' homes.

The finance company organized a separate unit, called the "Economy Purchase Plan" to operate the plan independently of other activities of the finance company. The plan calls for close cooperation between the utility, the finance company, the manufacturer and the dealer. This is accomplished through the Economy Purchase Plan Committee, which is an advisory body composed of representatives of the utility, the finance company and the cooperating manufacturers.

The Customer

An easy ownership plan is offered to the customer, with relatively low carrying charges, small down payments, small monthly payments, and the convenience of making monthly payments at the same time and at the same place that payments are made for the monthly utility bills. The customer may also make mail payments with one check, or one money order, for the monthly installment on the appliance and the monthly utility bill, thus saving postage and bank or money order charges. Following are examples of arrangements available:

| Appliance | Amount | Down Payment | Carrying Charge | Monthly Payment Gross | Net | Months |
|--------------|----------|--------------|-----------------|-----------------------|--------|--------|
| Gas Range | \$ 87.50 | \$2.50 | \$ 6.20 | \$7.85 | \$7.60 | 12 |
| Water Heater | 156.85 | 2.85 | 18.32 | 7.43 | 7.18 | 24 |
| Refrigerator | 217.35 | 3.35 | 36.20 | 7.20 | 6.95 | 36 |

The range or water heater could have been financed for 36 months. Two or more appliances may be purchased on one contract and terms of 48 months may be secured in such cases. Also certain installation charges

By JOHN A. WILLIAMS

Niagara Hudson Power Corp.,
Syracuse, N. Y.

may be included with the appliance contract.

Following are the terms of payment which are explained to all purchasers:

If paid promptly—Net rate
If not paid within ten days—Gross rate (net rate plus 25 cents)
If not paid within twenty days—Gross rate, plus reinstatement fee of \$1.00
If not paid within thirty days—Immediate repossession

As the delinquent customer pays more than the prompt paying customer, the latter is relieved of much of the unfair load he frequently carries.

collection plan promotes prompt payment, the dealer has few repossessions to handle. The dealer is given a plan that provides for small down payments and long maturities. (See accompanying table.)

The dealer is also enabled to include installation charges in the contract up to the following maximum:

| | |
|-------------------------|---------|
| Range | \$ 5.00 |
| Water Heater | 15.00 |
| Conversion Burner | 45.00 |

The dealer is required to furnish full and complete credit information on the purchaser; to give immediate attention to service calls so as to eliminate excuses for failure to pay promptly; and to make immediate repossession and repurchase upon notice by the finance company that an account is 30 days past due.

| Gas Appliances | Minimum Down Payment | Minimum Equal Monthly Instalment | Maximum Maturity Months |
|---|----------------------|----------------------------------|-------------------------|
| Range | \$2.00 | \$2.00 | 36 |
| Water heater (automatic storage).... | 2.00 | 2.00 | 36 |
| Refrigerator (domestic)..... | 3.00 | 2.00 | 36 |
| (A combination of two or more of above appliances financed on one contract) | 4.00 | 2.00 | 48 |
| Water heater (non-automatic)..... | 3.00 | 2.00 | 18 |
| Conversion burner | 4.00 | 2.00 | 36 |
| Furnace | 10% | 2.00 | 36 |
| Hotel and restaurant equipment | 10% | 2.00 | 30 |
| Approved appliances other than above: | | | |
| Cash sale price over \$49..... | 3.50 | 2.00 | 15 |
| Cash sale price \$30 to \$49..... | 3.00 | 2.00 | 12 |

The Dealer

The dealer, with proved integrity and merchandising ability, is offered a plan of financing appliance sales that is based much

By meeting certain requirements the dealer is enabled to receive wholesale financing on some items of his floor stock.

Through the use of the Economy Purchase Plan the small dealer is able to offer practically as attractive terms to his customers as the large dealer or the utility offers.

The Utility

The cooperating utility furnishes space for the Economy Purchase Plan representatives, furnishes required service information regarding the prospective purchasers, maintains accounts receivable records for prompt paying purchasers, prepares and mails monthly bills and delinquent statements, receives payments from purchasers made at its bill paying offices, remits amounts collected to the finance company

Contribution of the Customer Accounting Committee, W. E. Scott, Chairman.

| Appliance | Each Installment | |
|----------------|------------------|-----------------|
| | Gross Amt. | Net Amt. |
| WATER HEATER | 7.43 | 7.18 |
| Route No. → | 1218 | JOHN W SMITH |
| Customer No. → | 1790 | 1369 HINMAN AVE |
| Dealer No. → | 14 | CITY |

Exhibit 1
Form of
addressograph
plate

and renders required reports to the finance company. For these services the utility receives a fixed amount per bill from the finance company in reimbursement for expenses incurred. The utility has no responsibility for collections other than to receive payments made voluntarily by customers and to notify the finance company of accounts that are twenty days in arrears.

Following is an outline of the accounting procedure used by one utility in handling these accounts:

1. Upon receipt of a copy of the completed contract an addressograph plate is prepared similar to imprint, exhibit 1.

2. An imprint from the addressograph plate is made on the back of a tabulating machine ledger card, exhibit 2.

3. The required data, as shown on the front of the ledger card, are punched on two ledger cards in one operation. The addressographed card is placed in the accounts receivable tray and the duplicate card is placed in a pending file and held until the end of the month.

4. The monthly bills, exhibit 3, are prepared on a cycle basis, by making a quadruplicate imprint of the addressograph plate on the four sections of the bill.

5. The right hand part of the bill is detached and mailed on the same day the customer's utility bill is delivered.

6. The left hand part of the bill is filed in a pending file; is checked with the ledger ten days after the original bill was mailed; and the statements for accounts remaining unpaid are mailed.

7. Cash received is posted to the ledger through a rubber stamp imprint. A new pen and ink balance is extended after each cash posting.

8. Remittances are made to the finance company periodically for all Economy Purchase Plan collections.

9. At the end of the month a trial balance is secured by listing the account numbers and amounts due on an adding machine. Also a list of the month's sales by manufacturers, by dealers and by appliances is prepared on tabulating machines from the duplicate ledger cards. Carbon copies of the trial balance and of the sales analysis are furnished to the finance company.

10. The accounts are checked on a cycle basis and the finance company is notified of any accounts that are 20 days in arrears.

This accounting procedure has proved adequate to the needs of all parties, and is simple and economical in operation.

The Finance Company

The finance company promotes the extension of the plan through calling on dealers and manufacturers; handles all delinquent collection activities and furnishes the funds and personnel necessary to operate the plan. The finance company keeps separate records of Economy Purchase Plan operations and is committed to reduce carrying charges whenever practicable. Two such reductions have been made since the plan was placed in operation.

The Manufacturer

The participating manufacturers agree to repurchase appliances from the finance company where the dealer is financially unable to handle defaulted contracts. A small reserve is set apart, from the carrying charge, to cover the manufacturer's liability under this provision. Experience has proved that losses under Economy Purchase Plan contracts are infinitesimal compared with the increased volume of sales that the plan produces.

Results

One utility, with about 900,000 gas and electric customers, made a trial installation of this plan late in 1935. The results were so satisfactory that the plan was later extended to include all of the utility's territory. Several other utilities have also adopted similar plans. Up to January 31, 1937, the first utility's territory has produced 21,350 sales for the finance company with a total volume of \$2,842,920.

Surely a plan which produces results such as this and which broadens the base of the selling structure, through greatly increasing the number of dealers who are able to do a worth-while job of promoting and financing appliance sales, builds additional good will and business for the utility.

EXHIBIT FOR USE UNDER PATENT 1,772,652 U.S.M. 12-30-37 FROM:

| DATE | AMOUNT | DEBIT | CREDIT | BALANCE |
|------|--------|-------|--------|---------|
| 1 | 100.00 | | | 100.00 |
| 2 | 100.00 | | | 200.00 |
| 3 | 100.00 | | | 300.00 |
| 4 | 100.00 | | | 400.00 |
| 5 | 100.00 | | | 500.00 |
| 6 | 100.00 | | | 600.00 |
| 7 | 100.00 | | | 700.00 |
| 8 | 100.00 | | | 800.00 |
| 9 | 100.00 | | | 900.00 |
| 10 | 100.00 | | | 1000.00 |
| 11 | 100.00 | | | 1100.00 |
| 12 | 100.00 | | | 1200.00 |
| 13 | 100.00 | | | 1300.00 |
| 14 | 100.00 | | | 1400.00 |
| 15 | 100.00 | | | 1500.00 |
| 16 | 100.00 | | | 1600.00 |
| 17 | 100.00 | | | 1700.00 |
| 18 | 100.00 | | | 1800.00 |
| 19 | 100.00 | | | 1900.00 |
| 20 | 100.00 | | | 2000.00 |
| 21 | 100.00 | | | 2100.00 |
| 22 | 100.00 | | | 2200.00 |
| 23 | 100.00 | | | 2300.00 |
| 24 | 100.00 | | | 2400.00 |
| 25 | 100.00 | | | 2500.00 |
| 26 | 100.00 | | | 2600.00 |
| 27 | 100.00 | | | 2700.00 |
| 28 | 100.00 | | | 2800.00 |
| 29 | 100.00 | | | 2900.00 |
| 30 | 100.00 | | | 3000.00 |

Front

| APPLIANCE | | AMOUNT EACH INSTALLMENT | |
|----------------------|----|-------------------------|-----|
| GROSS | | NET | |
| WATER HEATER | | 7.43 7.18 | |
| 1218 JOHN W SMITH | | | |
| 1790 1369 HINMAN AVE | | | |
| 14 CITY | | | |
| DATE | 26 | DATE | 172 |
| COPIES | 26 | COPIES | 172 |
| 1 | ✓ | 1 | ✓ |
| 2 | ✓ | 2 | ✓ |
| 3 | ✓ | 3 | ✓ |
| 4 | ✓ | 4 | ✓ |
| 5 | ✓ | 5 | ✓ |
| 6 | ✓ | 6 | ✓ |
| 7 | ✓ | 7 | ✓ |
| 8 | ✓ | 8 | ✓ |
| 9 | ✓ | 9 | ✓ |
| 10 | ✓ | 10 | ✓ |
| 11 | ✓ | 11 | ✓ |
| 12 | ✓ | 12 | ✓ |
| 13 | ✓ | 13 | ✓ |
| 14 | ✓ | 14 | ✓ |
| 15 | ✓ | 15 | ✓ |
| 16 | ✓ | 16 | ✓ |
| 17 | ✓ | 17 | ✓ |
| 18 | ✓ | 18 | ✓ |
| 19 | ✓ | 19 | ✓ |
| 20 | ✓ | 20 | ✓ |
| 21 | ✓ | 21 | ✓ |
| 22 | ✓ | 22 | ✓ |
| 23 | ✓ | 23 | ✓ |
| 24 | ✓ | 24 | ✓ |
| 25 | ✓ | 25 | ✓ |
| 26 | ✓ | 26 | ✓ |
| 27 | ✓ | 27 | ✓ |
| 28 | ✓ | 28 | ✓ |
| 29 | ✓ | 29 | ✓ |
| 30 | ✓ | 30 | ✓ |

Back

Exhibit 2. Tabulating ledger card

| | | | | | | |
|---|-------------------------|-------------------------|-----------------------|---|--|--|
| NAME AND ADDRESS OF FINANCE COMPANY | | | | NAME OF FINANCE COMPANY | | |
| <p>THIS BILL MAY BE PAID AT YOUR NEAREST ELECTRIC COMPANY OFFICE</p> <p style="text-align: right;">REINSTATEMENT CHARGE ADDED AFTER MAR 28 1937</p> | | | | <p style="text-align: center;">PAYMENT COUPON</p> <p>GROSS AMOUNT DUE AFTER MAR 18 1937</p> | | |
| <p>THIS IS A STATEMENT OF YOUR ACCOUNT. BY PROMPT PAYMENT YOU WILL AVOID THE REINSTATEMENT FEE OF \$1.00</p> | APPLIANCE | GROSS AMOUNT | NET AMOUNT | <p>PLEASE BRING THIS BILL WHEN PAYING AT OFFICE OR AGENCIES</p> | | |
| | WATER HEATER | 7.43 | 5.18 | | | |
| <p>1218 JOHN W SMITH 1790 1369 HINMAN AVE 14 CITY</p> | | | | <p>1218 JOHN W SMITH 1790 1369 HINMAN AVE 14 CITY</p> | | |
| | | | | <p>IF YOU PAY BY MAIL PLEASE ENCLOSE THIS COUPON</p> | | |

Left hand part of bill

| | | | | | | |
|---|-------------------------|-------------------------|-----------------------|---|--|--|
| NAME AND ADDRESS OF FINANCE COMPANY | | | | NAME OF FINANCE COMPANY | | |
| <p>INSTALLMENT DUE ON MAR 8 1937</p> <p>THIS BILL MAY BE PAID AT YOUR NEAREST ELECTRIC COMPANY OFFICE</p> | | | | <p style="text-align: center;">PAYMENT COUPON</p> <p>GROSS AMOUNT DUE IF UNPAID AFTER MAR 18 1937</p> | | |
| <p>INSTALLMENT NOW DUE ON APPLIANCE CONTRACT</p> | APPLIANCE | GROSS AMOUNT | NET AMOUNT | <p>PLEASE BRING THIS BILL WHEN PAYING AT OFFICE OR AGENCIES</p> | | |
| | WATER HEATER | 7.43 | 7.18 | | | |
| <p>1218 JOHN W SMITH 1790 1369 HINMAN AVE 14 CITY</p> | | | | <p>1218 JOHN W SMITH 1790 1369 HINMAN AVE 14 CITY</p> | | |
| | | | | <p>IF YOU PAY BY MAIL PLEASE ENCLOSE THIS COUPON</p> | | |

Exhibit 3. Monthly bill. The right hand part of the bill is at the bottom

U. S. Theory of Customer Service Praised

IN no other country of the world, perhaps, are the general ideals of customer service in the widest sense so fully appreciated as a national whole as they are in the U. S. A. The American Gas Association is maintained by gas undertakings and appliance manufacturers in unison and is responsible for the testing of all, and the design of some, gas appliances and equipment, although certain of the larger undertakings maintain laboratories and carry out routine testing control of appliances and fittings. The A. G. A. has a series of correspondence training courses which are de-

Extract from paper, "A World Survey of Consumer Service," by R. N. LeFevre, presented at the International Gas Conference in Paris, France, June 12-16.

signed to be organized by local gas undertakings for group study.

A proper analysis of customer service in the United States would necessitate the publication of an extremely lengthy volume, but the following extract from a recent review will reveal the importance that America is attaching to the need for customer service.

Adopt Centralized System

"The theory of customer service might be divided into two parts: first, the more important side, its application to the customer; second, the methods and organization employed by the gas companies in giving this service.

"It is when we come to study the methods necessary to provide repeated and efficient service that we find how far the gas companies in the United States have gone. Almost all the companies I visited have or are in the process of adopting the central-

ized system by which all orders for service are received at one office and the work is then passed out either directly from a single central shop or through two or three according to whether this is made necessary by geographical size.

"The advantages of this method have made it almost universal. It provides possibility for the complete and central keeping of records, it avoids the differential treatment of consumers between district and district, it gives complete fluidity of labour to be able to cope with sudden calls in any one area and it makes for saving in costs by reducing overheads, transport and office work generally. If any criticism is to be made, I feel that enough money is not spent on refresher courses for the men, which in view of the ever-changing type of appliances is becoming more than a necessity."

Commercial Section

F. M. Banks, Chairman

J. W. West, Jr., Secretary

Hugh Cuthrell, Vice-Chairman

The Value of Employee Sales Training

By GEORGE M. IRVING

General Electric Company,
Cleveland, Ohio

IT has been my pleasure to supervise the employment and training of well over three thousand salesmen during the past twenty years. Of that number one would naturally witness a great many failures, entirely too many. So many times I am asked what I believe to be the greatest cause of failure in the selling business. The answer to that question is "IGNORANCE," a lack of knowledge of the job in hand. Analyze each case of failure and you will come out with the same answer. You will find that the individual did not know enough about his product or proposition so that he had a firm belief in that product or proposition and for that reason his sales story did not carry real weight and conviction. Or you'll find he did not know his territory and how to properly work it; or he did not know his prospective buyers and how to break down their natural sales resistance, how to talk their language; or, last but not least, he did not know himself and his own weaknesses and how to overcome them or his strong qualities and how to make the best use of them.

Sales Story

There is an old story, yet one which is still good, of the Darcy down south who was going from door to door. One day a Policeman stopped him and asked what he was doing. "I'm a salesman," answered the Darcy. "Is that so? Let's see your license," demanded the Policeman. "License? Boss I ain't got no license," the Darcy replied. "What, no license? Don't you know that you can't sell in this town without a license?" The Darcy was stuck for a minute, his face then brightened up and he said, "Well, Boss, you sure don't gonna hep me a lot. Here I is been working long here for six months and I never did sell nothin' but I never did know the real reason 'til now." Unfortunately that's the way it is with too many who are in this business. They simply take the title of salesman or hang out a shingle as a merchant and expect to succeed doing nothing more than that about it.

Just what is this business you are in? What do you do when you make a sale? Salesmanship is the business of "Mastering Minds." You can't make anything more or less out of it. When you make sales you must take control of and master the minds of other people to make them think as you think, see as you see and act as you would have them act.

Here is a young chap who would like to be a Dentist. He must spend some twelve to sixteen years of his life going through schools and colleges to learn his profession. He then comes out, many times to act as an assistant, to get the practical side of his training. He joins clubs where he might associate and exchange ideas with others in his profession. He attends clinics two or three times each year. He has a shelf of reference books that he goes to quite regularly. Need I continue? The point I am trying to get across is that after spending some twelve to sixteen years to learn the profession he continues to dig and dig. For what? For a little better knowledge of how to treat thirty-two teeth.

Here you and I are in a business of "Mastering Minds" and we do not have but thirty-two different kinds of people to deal with but we have hundreds, people who do not look alike, think alike, talk alike, nor do they buy for the same reasons; people with all kinds of little likes and dislikes, whims and fancies, and yet we expect to go out and successfully deal with that kind of a public with but a pound or two of training.

Visualization Technique

I wonder how many of you thoroughly understand what takes place in the prospect's mind before the sale is made? Do you appreciate that a mental picture must be formed in the mind of the prospect before the sale is completed? That is exactly what happens. The prospect must be able to visualize himself or herself using, enjoying and profiting by that which you sell or no sale takes place.

What then does that make of you? In a sense you are an artist just the same as those who paint pictures on canvas. As I see it you must use more care and skill than those who work on canvas because they have their picture before them and if they make a slight error they quickly see it and can make correction. You are forming, or at least helping to form, a mental picture on the mind of your prospect. You cannot see that picture and therefore must use more care and skill that you do not make a smear or blot.

Those who work on canvas use brush and paint. You who work on the minds of others must use words, tones and actions,

the only three means of communication known to man. If you fail to use all three with care and skill you are very apt to create a mistaken idea in the prospect's mind. When one means conveys one thought and another an entirely different impression you immediately contradict yourself, you arouse suspicion and unknowingly kill your sale because you destroyed the faith of your prospect.

Unfortunately there are thousands in all walks of life who are making miserable failures of their lives, or who are remaining in mediocre positions when they might have gone higher, because they have not given enough thought, time and study to learning how to more effectively use the three means of communication.

Action and Acting

Tones are more important than the words you use, but actions are more effective than both tones and words. "Actions speak louder than words," will always be as true as the day it was written. The successful salesman then must be a good actor. He must learn to dramatize his story, to live what he says, just as a good actor must learn to live his part.

I like to think of a salesman when he goes on the firing line as a fine actor going to make a stage appearance. His job is quite the same. The actor must entertain his audience, the salesman must entertain his prospect.

Contrast again the amount of rehearsing the actor with the smallest part in the play must do to keep himself fitted for his part to the small amount of rehearsing the most important salesman gives to his story when he goes on the firing line to entertain his prospect.

Wouldn't it be embarrassing to ask this group for a hand raising of those who had spent but fifteen minutes during the past twelve months standing before a mirror trying to develop a new and better facial expression that they might use to greet Mrs. Prospect at her home or on the show room floor? Forty-seven and one-half per cent of all people who leave one store and go elsewhere to spend their money do so because of indifference. Much of that business is lost due to an indifferent approach, the icy stare, yet how many are spending a bit of time trying to improve their approach?

Do you appreciate that every time a prospect lays eyes on you, you are carefully sized up from head to foot and placed into one of three classifications? You are clas-

sified as a leader, a business builder, one who has confidence in himself, his house, his line and the service he has to offer to the public; or as an average salesman; or a below the average, one who is there more or less to beg for business because he, the salesman, needs it. In whatever classification you are placed you are dealt with accordingly. Unfortunately too many are allowing themselves to be classified as average or below the average through their unwillingness to recognize and overcome some of their own shortcomings.

There will never come a time when a salesman can afford to stop studying. The salesman who does not believe this, who does not believe that it is becoming harder and harder each year for the untrained man to live and above all, the salesman who does not appreciate that the public are becoming better trained every day, week, month and year on how to turn him down is on the road to failure and in high gear.

Reaching the Prospect

Turn this over in your minds. The average prospect you contact is being contacted on an average of ten times a day, five days a week by someone who wants to sell something. The average prospect has been called on that way over a period of ten years. Now multiply and you quickly get the total of twenty-six thousand times your average Mr. or Mrs. Prospect has been contacted. Twenty-six thousand times that average prospect has tried to learn a new and better way of telling some salesman that he did not need or could not afford whatever the salesman was selling. Now you try doing something over and over again for twenty-six thousand times and you will come pretty near to being perfect.

Professor James of Harvard, some time ago made the statement that the average man uses but one tenth of his brain power. Nine tenths of the most powerful piece of machinery known to man laying there dormant, going to waste. If Professor James were right, and I certainly would not challenge his statement, all the average man would need to do would be to develop and use an additional one tenth of his brain power in order to increase his earning power one hundred per cent.

Professor James Knox for years has been saying that the great American Desert did not lay out in the great open spaces of Idaho, Arizona, California or New Mexico, but that it was up under the average man's hat. A vast desert laying there waiting to be cultivated and in the majority of cases nothing was being done about it.

Why do such men as Professor James, Knox and others continue to make such statements? I believe it is only because too few have reached the point where they fully appreciate that this world and everything that is in it is in a constant process of deterioration, that everything goes to pieces, nothing stands still. The best built

homes, the finest of machinery and the sturdiest of ships go to pieces. Nature is constantly working on her hills with rain and storms. Everything we know anything about goes to pieces and, of course, more rapidly unless we constantly repair. The same holds true of you and me. We are going to pieces and, as all other things, will go to pieces more rapidly unless we constantly repair by way of keeping our minds wide open, getting new thoughts and new ideas, learning new and better ways of tackling our daily problems that we might go back and tackle those problems with that added vim, vigor and confidence that is necessary if we intend to carry on through this period of a constantly narrowing margin of profits and keener competition staring us in the face every day we go on the firing line.

Study Program Urged

Many feel they are doing all that is necessary about keeping themselves fit and making a study of the business when they spend one hour each week or, more often, one hour each month running through company sales bulletins and other sales data. To me that plan is of little or no value. One who uses such a hit-and-miss plan is generally found waiting until he becomes so rusty it is pitiful. He finds himself losing sales right and left with new sales problems cropping up daily that he cannot master. He then decides he should do something about it so he gathers up a few sales bulletins and some other sales data and goes home to study the business. On arrival he finds that unexpected company has dropped in or that something else has come up which makes it impossible for him to get to his study that evening so it is set aside until the next when something else turns up and so on he goes, always planning, never doing.

Suppose they do get to it on that basis. They will no doubt cram more ideas into their minds than they can possibly retain until it comes time to put those ideas into action so their time has simply been wasted. There is but one way they will ever get the job done properly and that is to lay out a very definite program of study and set aside a certain portion of their each and every day to be given to learning something new about the business. There is not one in this group who could not well afford to be giving at least thirty minutes of his time daily to some course of study.

Oh I know well what goes on in the minds of some when I suggest a study program and further when I suggest a minimum of thirty minutes daily for that purpose. If given an opportunity they would say, "Now just a minute Irving, you didn't need to come all the way out here just to tell me I should learn more about the business, I knew that. I know there are many things about my business and about salesmanship which I do not know which, if I did know, would help me to do a better selling job. You didn't need to tell me what to do. What I would like to have you tell me is 'how to do' the thing you

suggest, how to cram a thirty minute study program into my present daily schedule. Here it is. I must be in the office at eight-thirty. We are there until nine-thirty for salesmeeting. It takes thirty minutes to get into my territory. I am supposed to make (—) canvas calls each day, (—) user contacts (—) back calls. With that my day is used up and most every evening I must make evening calls. I take one evening a week off for my family and that's the way it goes. Now you show me how any man is going to find time for your thirty-minute study period with that kind of a schedule."

Well, to the fellow who thinks that way I always tell the story of the boy who went to Socrates and said: "Socrates, I want wisdom." Socrates asked, "Do you really want it?" "Yes," answered the boy. "Come with me," said Socrates. He lead the boy into the water up to his neck, took him by the hair of the head and pushed him under the water. In a few minutes the boy broke loose and climbed to the bank nearly drowned. Socrates shook him and brought him back to life a bit, then said, "Now young fellow, whenever you want wisdom as badly as you wanted air you'll get it."

Selling a Profession

And so it is with those in the selling profession who feel they should know more about the business but haven't the time to study. When they reach the point where they are willing to think of the business as a profession, one that is deserving of the same careful thought they would just naturally give to medicine, law, civil engineering or any of the hundreds of other professions I might mention and they want a better knowledge of the business as badly as they would want air under the conditions of that boy,—THEY WILL GET IT. They will then find a way or make one.

For too many years most organizations have been thinking of sales training as something that applies only to those who are hired as salesmen. Further than that employees of the general staff have been sitting back apparently unmindful of the fact that their success and the success of their organization depends entirely upon sales. These conditions should be changed and changed rapidly.

The success of every individual from the lowest paid laborer to the President of these United States depends upon his or her ability to sell. The success of every organization depends upon the ability of all those who go to make up that company to sell. It is just as important that the janitor of an organization be taught how to intelligently tell his friends and associates about the services his company has to offer as it is for the President to know how. Many organizations today are thinking that way and have introduced both printed and lecture courses to their entire organization.

While I do not think it is fair to the cashier or the salesman to expect the cashier to go out and do the selling job along with his or her other duties I do think it 100% right and in keeping with good busi-

ness to see to it that that cashier as well as the stock clerk, the service man, the errand boy and the janitor know how to intelligently explain their company's service and to expect them to tell their friends and acquaintances about that service and thereby develop and bring in prospects. In other words they should be taught how to talk business and "talking business" is salesmanship.

An employee, regardless of position, who

is not sufficiently sold on his organization to "boastfully" tell everyone he comes in contact with who he works for and what they sell is in the wrong place. On the other hand, if he is sufficiently sold on his organization to where he will "boastfully" tell everyone he meets who will stand still long enough, who he works for, what they sell and ask them to buy, he need not worry about his success and he will greatly help his company along the same road.

Oklahoma Natural Gas Company Enlarges Home Service Department



Left to right: Mildred R. Clark, home service supervisor, Tulsa; Pauline Sherwood, assistant home service director, Oklahoma City; Harryette Hunter, home service director, Oklahoma City; Sarah Garrison, assistant home service director, Oklahoma City; Doris McKnight, home service director, Enid; Marian Goss, home service director, Muskogee; Louise Anderson, home service director, Tulsa; Mary Frances Reece, assistant home service director, Muskogee; Ruth Owen, assistant home service director, Tulsa; Gwen Workman, secretary to Miss Clark; Rosemary Locke, home service director, Tulsa

THE increasing amount and popularity of home service work in the Oklahoma Natural Gas Company territory has necessitated enlarging the staff according to an announcement by Mildred R. Clark, home service supervisor for the company.

New members of the staff, all of whom are Home Economics graduates, include Miss Pauline Sherwood and Miss Sarah Garrison of Kansas State College at Manhattan, Kansas; Miss Ruth Owen, Oklahoma University at Norman, Oklahoma; and Miss Mary Frances Reece, Texas State College for Women, at Denton, Texas.

The above picture was taken at the close of the recent two weeks' training course for the new staff members when the entire staff was called into Tulsa headquarters to plan the next year's work.

The intensive training course included

not only specific training in home service work, but training in all phases of the company's operations presented by heads of various departments. "The importance of a complete understanding of all phases of the business is essential to a well-rounded and effective home service program," Miss Clark stated, "therefore, time invested in adequate training reflects itself in increased sales and good will toward the company!"

This company's home service program includes an extensive home call and demonstration program in a dealer cooperative plan as well as supervision of four model kitchens and auditoriums for the use of the public. The program also includes kitchen planning, preparation of news column copy for forty newspapers and sales promotion activities throughout the sixty towns served by the company.

Dr. Vandaveer Conducts Appliance School

DR. F. E. VANDAVEER, supervisor, A. G. A. Testing Laboratories, Cleveland, participated in a four-day Appliance Service School held by the Oklahoma Natural Gas Company, Tulsa, Oklahoma, July 20-24. H. A. Newton, sales manager of the Tulsa district presided, with Miss Mildred Clark, home service director, assisting. Home service women and gas company service and installation men attended the meetings.

"The A. G. A. Laboratories, Their History and Testing and Certification Program" was the subject of Dr. Vandaveer's first talk. Flues and vents, water heaters and water heater adjustments, gas range improvements and changes, and the effect of such changes on servicing and adjustment, space heaters, central heating appliances, gas saving equipment, and the comparison of gas and electricity for cooking were discussed in later talks.

Other speakers at the Service School were L. A. Farmer, superintendent of distribution, and John Warden, general sales manager of Oklahoma Natural Gas Co., Dr. Sidney Born, director, Petroleum Engineering School, University of Tulsa, Roy Parker, Carl Dean and Mildred R. Clark of the local gas company.

Following the Gas Company Service School in Tulsa, Dr. Vandaveer gave a lecture at the University of Missouri summer session, on modern gas equipment and the Laboratories' Testing and Certification program.

Chamber of Commerce Praises Gas

THE Industrial Department of the Los Angeles County Chamber of Commerce devoted the May-June issue of its publication "Industrial Los Angeles County" to natural gas and its splendid contribution to the growth and prosperity of Southern California.

Under the heading "Major Gas Reserves Here," it pointed out that the natural gas supply of the region comes from 33 fields and that its continuity is assured for many years—perhaps for generations. Also pointed out was the variety of industries which had come into the territory because of the availability of this flexible, efficient fuel and which now find it essential to their operations. Among them are listed pottery brick and dishes, cement, steel mills and metal working plants, tires and rubber goods, and automobile and airplane plants.

—P. C. G. A.

Screw But Sensible

A new gas pot type of heat treating furnace has just been brought out in which the products of combustion circulate around the pot like the threads of a screw.

Industrial Gas Section

Ralph L. Manier, Chairman

Eugene D. Milener, Secretary

Hale A. Clark, Vice-Chairman

Modern Gas Equipment Featured at Caterers' Exposition

THE annual get-together of the men who are the leading food stylists of this country and Canada was held at The Bellevue-Stratford, Philadelphia, Pa., during the week of August 16. This was the convention of the International Stewards' and Caterers' Association and was attended by hundreds of men and women from practically every state, all of whom are experts in catering to the most exacting tastes of discriminating people in their home communities.

Realizing the great influence these men and women have in the important kitchens of the nation, the American Gas Association, through the Committee on Displays at National Industrial Expositions of the Industrial Gas Section, sponsored a display of modern heavy duty gas cooking equipment that was educational as well as attractive from the standpoint of equipment shown.

Heavy Duty Ranges Attract

The chief attention-getter was a pair of heavy duty gas ranges. One was a late 1937 model and one was of the vintage of 1934. Under the caption "Here's Proof That Modern Gas Equipment Will Save You Money" large dial gas meters, one connected to each range showed that the oven of the fully insulated 1937 model kept a temperature of 450° with about 25% less gas than was used by the older, uninsulated range. Graphic charts showed continuous records of temperatures both inside and outside of each oven. Those who visited the booth could easily recognize not only the economy of the new ranges, but the superior working conditions for those who work around them.

The new heavy duty ceramic gas broilers occupied an important place in the gas section of the exposition, which occupied the large roof garden of the hotel. These large gas appliances have been completely remodeled for more attractive appearance and for ease in keeping clean; an important point in the sanitary commercial kitchens of today.

Among other equipment shown was a gas heavy duty deep fat fryer designed for the larger kitchens, and a two-deck gas bake oven with individual heat and thermostatic temperature control for each deck.

An interesting demonstration featuring the preparation and baking of pies was given Monday evening and again on Wednesday afternoon for the visiting stewards and caterers by the Philadelphia Restaurant Association who were hosts for the convention. The large deck gas oven used in this

demonstration was one of the contributing reasons for the wholesomeness and attractiveness of the different kinds of pies that were baked by Monroe "Boston" Strause, the outstanding chef in charge.

The American Stove Company's new line of heavy duty gas ranges was shown by the local dealer and several miscellaneous commercial gas cooking appliances were exhibited and demonstrated by various dealers. Savory, Incorporated, showed for the first time the all-stainless-steel revolving gas toaster in addition to the standard por-

celain enamel models. Anthracite coal and electric ranges were also exhibited at the exposition.

The American Gas Association exhibit was conducted with the cooperation and help of The Philadelphia Gas Works Company, Detroit-Michigan Stove Company, Standard Gas Equipment Corporation and The Blodgett Oven Company. Harry A. Sutton, chairman of the Association's Industrial Display Committee, Frank H. Trembley, Jr., assistant general sales manager, The Philadelphia Gas Works Company, and Eugene D. Milener, secretary, Industrial Gas Section, organized the gas exhibit. The booth was manned by Charles C. Hanthorn and David M. Barrett of The Philadelphia Gas Works Company.

Natural Gas Engines Operate Air Conditioning Equipment

NINE natural gas engines are being used to furnish power to operate air conditioning equipment and generate electricity for the gas industry's exhibit at the Greater Texas and Pan American Exposition in Dallas, Texas. Yet so silently do the engines perform their work that in the Lone Star Gas Company's auditorium adjoining the model engine room a cooking demonstration is held daily, undisturbed by sound from the engines, although at one end of the auditorium a large plate glass window affords a vista into the engine room immediately beyond.

Three No. DG60 Dual Lycoming gas engine units supply a total of 180 kw. generating capacity to take care of electrical requirements of the building, which include 123 kw. lighting load and 33 kw. of small motor load supplying the fan and coil units and evaporative condensers.

Three AG-8-50 Lycoming engines were installed to furnish power for the 120-ton capacity air conditioning equipment. The air conditioning equipment consists of three No. 7G8 Carrier compressors, three No. 9Q9 Carrier evaporative condensers for Freon cooling, three No. 39Q9 Carrier Weathermaker fan and coil units and three No. 39Q7 Carrier Weathermaker fan and coil units.

Three of the fan and coil units, mounted on a platform above the stage of the cooking school, handle the cooling requirements of the auditorium while the cooling of the small auditorium and the exhibit display booths is accomplished by three fan and coil units above the main corridor. A complete system of air ducts and registers was installed to care for the circulation of conditioned air.

The Freon piping to the six fan and coil units was carried overhead above the engine room with a pressure and suction line to each compressor down through the ceiling. Each overhead unit was connected to the sewer system for the removal of condensation from the cooling coil. By-pass dampers on the fan and coil units were controlled by three thermostats.

The speed of the gas engines operating the compressors is controlled by the suction pressure of the Freon compressors in such a manner as to permit use of the engines on a continuous cooling cycle, varying the output of power to the compressors in direct proportion to the amount of cooling required at any particular time. The engines are belt connected to the compressors with a normal operating speed of between 900-1350 RPM. Compressor speeds vary between 350 to 500 RPM. Normal operation of the Freon system is 35 pounds suction pressure and 120 pounds head pressure.

Bryant Heater Advertising

THE Bryant Heater Company, Cleveland, Ohio, has inaugurated an intensive national advertising campaign to sell the advantages of gas heating and air conditioning equipment, according to an announcement by Arnold E. Schwarz, advertising manager. Bryant equipment is being advertised in the *Saturday Evening Post* and a selected group of architectural, home and trade magazines. In addition to gas industry and chemical trade journals, full page advertisements have been prepared for the *American Home*, *House Beautiful*, *House & Garden* and *Architectural Forum*.

Technical Section

M. I. Mix, Chairman

H. W. Hartman, Secretary

J. V. Postles, Vice-Chairman

A Bibliography on Distribution Stoppages

Principally Concerning Dust and Gum

Compiled by LUIS HILT, Librarian

American Gas Association

NOTE: Two separate bibliographies were originally compiled on the gum problem and the cleaning of natural gas. In recent years, however, both problems have had the interest and attention of the industry as a whole. To meet numerous requests for copies it was found more practicable to include both dust and gum in one comprehensive bibliography.

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Gum and problems arising from its presence in distributed gas. W. L. Shively, A. G. A. Proc. 1931: 765-70; Discussion 770-4; Same. Gas Age-Rec. Oct. 24, 1931: 619-22.

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New Gas Indicators



UCC All-Service Indicator Model B-1

THE Linde Air Products Company announces a new line of gas indicators, developed for quickly and easily detecting explosive or irrespirable gas-air mixtures, the UCC Gas Indicators. These instruments are designed to fulfill the requirements of public utilities, gas plants, shipping companies, petroleum companies, paint and lacquer companies, solvent manufacturers, fire departments and insurance companies for locating underground leaks, establishing purge-end points, and determining hazardous conditions in manholes, oil tankers, oil storage tanks, holds of ships, sewers, conduits and tunnels.

UCC Gas Indicators are available in three models. The UCC Combustible Gas Indicator Model 12-B is for the detection of combustible gases or vapors. A graduated meter scale indicates by direct reading whether combustible gases are present, and, if they are, whether concentrations are above, within, or below explosive limits.

For increasing the utility of this instrument, a flame-type safety lamp attachment is available which makes it additionally possible to detect oxygen deficiencies.

The UCC All-Service Indicator Model B-1 combines three units in one. It shows the presence of combustible gases, indicates an oxygen deficiency, and, in addition, includes a toxic chamber for determining the presence of carbon monoxide and hydrogen sulphide in dangerously toxic concentrations.

Both the Combustible Gas Indicator and the All-Service Gas Indicator are equipped with a patented and exclusive air dilution valve. By means of this valve, incoming samples can be diluted with any volume of air, thus making it possible to detect flammable conditions which might not otherwise be indicated due to a lack of oxygen. It also permits following a complete purging operation from start to purge-end point with the use of inert gas as a purging medium. It is indispensable in locating underground leaks when the concentration in bar holes is above the lower limit of flammability.

Corrosion Conference

AS supplements to the third conference on underground corrosion to be held in Washington, D. C., this fall, two open half-day meetings will be held for the discussion of selected conference papers. The first of these will occur in Los Angeles on Tuesday, September 14, under the direction of William Henderson of the Southern California Gas Co., and the second will be held in Houston under the leadership of Starr Thayer of the United Gas Public Service Co., on Wednesday, September 22.

Those wishing to attend the meetings should contact the above-named men for information as to time and place of meetings in order that they may be notified of possible changes in the date.

Charles C. Atwood Is Dead

CHARLES C. ATWOOD, assistant chief engineer of The Brooklyn Union Gas Company, Brooklyn, N. Y., died suddenly August 21.

Born on Sept. 3, 1879, in Cleveland, Ohio, Mr. Atwood was graduated from Cornell University with an M.E. degree in 1901. He first entered the gas industry as an employee of the Consolidated Gas Company of New York but later joined the Bartlett Hayward Company as assistant gas engineer. For this latter concern he was in charge of designing, constructing and operating toluol plants.

On November 18, 1918, he began his service with The Brooklyn Union Gas Company where, in addition to his duties as assistant chief engineer, he became active in promoting employee welfare. For 14 years he was chairman of the company's executive committee on safety and sanitation and was greatly interested in accident prevention work. He is credited with the success of the Employee Suggestion Plan of the company.

For many years Mr. Atwood was active in the American Gas Association and the Empire State Gas and Electric Association. He was also a member of the American Society of Safety Engineers, the National Safety Council, the Brooklyn Chamber of Commerce and Crescent Club.

Testing Laboratories

R. M. Conner, Director

Managing Committee: J. S. DeHart, Jr., Chairman

N. T. Sellman, Secretary

Certified Semi-Rigid Tubing and Fittings Now Available

By K. R. KNAPP**Chief Engineer, A. G. A. Testing
Laboratories**

FOR a number of years the use of semi-rigid gas appliance tubing for gas conduits on appliances as well as for the connection of gas appliances to house piping has been steadily increasing. In recognition of this tendency it was considered desirable some years ago to prepare suitable approval requirements covering such material. A committee was formed for this purpose in May, 1932. After considerable preliminary work including an extensive research investigation necessary to establish suitable requirements and test methods, a set of tentative standards was formulated and submitted to the industry for criticisms. After suitable revision, the final material was presented to the American Standards Association and approved by it as A S A. Listing Requirements for Semi-Rigid Gas Appliance Tubing and Fittings on December 8, 1936. These standards became effective January 1, 1937.

Test Work

Since that date the Laboratories have conducted a considerable amount of test work on both semi-rigid tubing and fittings submitted for certification by their respective manufacturers. During its course, it was observed that in some instances fittings submitted for test did not conform in all respects to the acceptable dimensions as taken from the S.A.E. Handbook and incorporated in the listing requirements. Furthermore, some complications were also encountered due to the difficulty of satisfactorily placing the manufacturer's identifying marking on tubing during its fabrication. The orig-

inal requirements specified that all tubing of three-eighths inch outside diameter or larger should be marked every twelve inches of its length with the manufacturer's name or trade-mark. Statements were made by leading manufacturers that present fabricating processes did not readily lend themselves to so marking tubing of lighter wall thicknesses commonly used as gas conduits on appliances.

In the case of some individual fittings, their certification was not possible under the present standards as certain dimensions were not in accordance with those specified by the requirements. In most instances these were of such a nature that they were not regarded as of great importance as they did not concern what were considered as essential dimensions. Other features such as the most suitable test methods to be followed in the testing of fittings for leakage also appeared to require some modifications in order to make them more practical in application.

These points were accordingly reviewed by the committee and certain revisions in the requirements were agreed upon. It was felt that a liberal interpretation of the dimensional requirements for fittings should be permitted and any deviations from them in a safe direction allowed so as not to inflict a penalty on ingenuity in design on

the manufacturer's part. In line with this thought it was decided that no mention in the requirements should prevent the use of fittings which were everywhere stronger or larger in respect to essential dimensions than called for in the S.A.E. Code. No variations, however, were permitted in such dimensions as those relating to size of gas ways, threads, or others of basic importance.

Marking Modified

It was also decided that a considerable modification in the required marking of tubing would be desirable. This was true particularly in the case of fittings intended for use as gas conduits on appliances. It was recognized that such tubing was frequently purchased in long lengths and was not usually marked by manufacturers at present and that furthermore, considerable extra equipment, as well as additional operations, would be required to do so. It was accordingly decided that the marking of such tubing should be confined merely to a sticker or tag attached to the bundle for identification purposes. However, tubing of the heavier wall type, used for the connection of appliances to house piping, would still be required to be marked every twelve inches of its length in the manner formerly described.

Modification of the requirements to the extent outlined has enabled certification to be extended to both copper and aluminum tubing made over a range of sizes from one-fourth inch to one and one-eighth inch outside diameters. Numerous types of fit-



Subcommittee on Listing Requirements for Semi-Rigid Gas Appliance Tubing and Fittings, and guests, in session at Kansas City, Missouri, May 10, 1937. Left to right: C. L. Trevitt, Community Natural Gas Company; C. A. McKinney, F. O. Suffron, A.G.A. Testing Laboratories; F. G. Smith, The American Brass Company; C. B. Wilson, Chairman, Arkansas Louisiana Gas Company; R. M. Conner, A.G.A. Testing Laboratories; R. B. McKee, Aluminum Company of America; C. B. Hasford, The Eastman Manufacturing Company; D. W. Lewis and R. D. McIntosh, The Imperial Brass Manufacturing Company

tings of both the flared and compression type for use with such tubing have also been certified.

Both tubing and fittings are shown under their respective manufacturer's names in the August Supplement to the July 1st issue of the Directory of Approved Gas Appliances and Listed Accessories. This, it is believed, will be of considerable assistance to manufacturers of gas appliances in making available to them a source of supply of both tubing and fittings which have been tested according to nationally recognized standards and found to comply with them. This is particularly true in view of the fact that certified products of this type are now being specified by the newer approval standards for domestic gas-burning appliances. Utility companies and others who are interested in employing semi-rigid tubing for the connection of appliances to house piping will also have available certified tubing of the heavier wall type as well as accompanying fittings.

In view of the increasing number of inquiries now being received concerning the use of semi-rigid tubing and fittings for this particular purpose, it is believed a very definite demand exists for a certified list of such products. Much may be said in favor of their use from the standpoint of convenience, and it is expected that they will rapidly come into general use for the connection of many commonly used types of appliances.

Workers' Jury Decides Accident Causes

A WORKERS' jury which holds a private "inquest," with the station engineer acting as "coroner," whenever a colleague has been injured at work, was revealed in a recent news item in the London *Daily Mail*. This practice is followed by the South Metropolitan Gas Company and has resulted in a substantial reduction in the number of accidents.

Mr. Brewer, secretary of the company, said: "Our jury system was started in 1892 by Sir George Livesey, and since then the number of accidents on the premises has been reduced from 82 per thousand employees in 1898 to 24 per thousand in 1933. After their inquiry, the 12 workmen state the cause of the accident and make recommendations for preventing similar mishaps."

G. L. Blanchard Dies

GEORGE L. BLANCHARD, treasurer and general manager of the Capital City Gas Company, Montpelier, Vt., a former mayor and one of the most active bankers and business men of the capital city, died July 29. He was 75 years of age.

Mr. Blanchard had served as mayor in 1921 and 1922. He was one of the incorporators in 1902 of the Capital City Gas

Company. He was also president of the Green Mountain Mutual Fire Insurance Company, and was one of the active members of the Blanchard Real Estate partnership. He was a member of the Vermont Historical Society.

SAFETY PAYS

(Continued from page 298)

of "pigs," rubber blankets, and other protective equipment on hot work, are set forth in clear, simple language. Foremen are held strictly responsible for the condition of all tools, winches, brakes and equipment on their trucks. All rubber gloves, linemen's safety belts, climbers, etc., must be checked and tested regularly. Inspection and checks at irregular intervals by general foremen or division superintendents have a salutary effect in keeping everything in jam up shape.

Every serious accident is promptly investigated by a committee, the majority of whom have no direct responsibility for the work where the accident happened. In this manner a more impartial, thorough and prompt report of the actual causes of the accident is made. It is also this committee's duty to make specific recommendations that will prevent a recurrence. This report is mimeographed and sent to every division, where it is made the subject of discussion, and believe me, these discussions are free and frank. Many a foreman who thought he had no responsibility and that the accident couldn't have been avoided, changed his mind before the "court-martial" was finished. An impartial, thorough investigating committee can usually find the true cause of every serious accident. The important thing is to prevent a recurrence by a thorough explanation and discussion of the accident with all other crews liable to be caught in similar circumstances. Firm, prompt penalties for carelessness or infraction of safety rules are applied. In our business *the foreman's first duty is the safety of his men* and it is our endeavor to *never let him forget it*.

In regular quarterly operating practice meetings where all phases of the company's operations, such as rural line specifications and construction, cost of fuse replacements, servicing customers' appliances, unnecessary automobile expense, high line and substation mainte-

nance methods are discussed, safety and safe methods of doing difficult and hazardous jobs are discussed by foremen as much as by engineers and their effect upon costs brought out.

HOME SERVICE TOMORROW

(Continued from page 307)

One of my neighbors, Rochester Gas & Electric Corporation, recently tried an experiment using Home Service girl on Pre-Salesman's Calls. Here is a brief report on the activity:

"Last month one girl was trained on gas range calls with the idea that Home Service girls might produce gas range prospects. She was put in one district to call house to house and talk to the woman about recipes, and new methods of cooking made possible by modern gas ranges.

"The result of two weeks' work seems to indicate that this kind of promotional work can be made very profitable. Seventy-one women were interviewed and the Home Service girl reports that 32 were interested. Three prospects have been given to salesmen—there are 3 return calls to be made in June and a total of 18 prospective sales to be made within 6 months. She found only one woman who insisted at the end of the interview that the electric range still was preferable."

The opportunities for Home Service are many. The problems we face nationally are numerous, too. There is a general demand for more Home Service workers and a lack of suitable candidates. The day when average talent was good enough for Home Service has passed. Because our housewife customers and their helpers embrace a quite complete cross section of society, home service workers must be sufficiently adaptable to make an effective impression with this entire cross section. We are demanding exceptional performance and that in turn requires workers of a high calibre.

There is, so far as I know, no uniformity in the salary scale of Home Service. Too often, it is entirely out of proportion with the demands of the job. We realize that the gas industry has carried many of us through some pretty difficult years, but I do believe that a rather general revision in the salary scale of Home Service will be necessary if the needed talent is to be attracted and kept.

The increased interest which management is taking in Home Service

work—the closer supervision it is exercising—the thoughtful analysis of how Home Service departments can be most productively used—are the greatest guarantee of a real future in this work. It has always been true that those executives who know *most* about Home Service have been its greatest supporters and I should feel that I had failed in a duty to this work in which I am engaged and for which I am this year the national spokesman, if I did not urge that you revise any out-moded ideas you may have concerning it.

And, in the intensified interest apparent today concerning the part Home Service can play in selling and load building, a word of warning is timely, too, I think. Let's not permit the pendulum to swing too far and too fast lest the old clock stop.

The Public Relations work which Home Service can do and is doing is

still, to my mind, the most important contribution Home Service can make to the industry. Within the last few months I have heard two able utility men express satisfaction that Home Service is "at last concerning itself with load building and getting away from all this good-will work." I wonder sometimes just how these gentlemen imagine this nebulous good-will is won. Don't they understand that a Home Service worker contacting our customer in her own home where, through explanation, inspection and demonstration of a new or an old appliance she is helped to appreciate its possibilities, she will make greater use of it and, incidentally, develop a glow of good-will toward the company we represent? Building good-will *is* building load and it is, I repeat, still the most important contribution that Home Service can make to our companies.

Let's remember, too, that Home Service women are able, today, to reach the housewives of this nation with sales-slanted demonstrations and Kitchen Planning services because of the welcome earned through the public relations work carried on for years. Remove that phase of our service and in a very short time you will have just a group of saleswomen with all the attendant handicaps.

In my introduction I told you that the three aims of Home Service have never changed: to increase good public relations; to increase the sale of gas appliances; and to increase the sale of gas. The doctrine that he who never gives, never gets has been very effectively phrased by some one—"When people determine to concern themselves with only that which is definitely and obviously useful, the days of their own usefulness are already numbered."

Personnel Service

SERVICES OFFERED

Gas Engineer—Superintendent (M. E.)—Broad experience in supervision of coal and water gas manufacture, plant design and erection, distribution routine and construction, heating and refrigeration. Also extensive and well rounded experience in appraisals. 1133.

Sales Engineer: Sixteen years of gas company experience selling industrial, commercial and space heating equipment. Can make surveys and supervise installation and maintenance. Would like to represent either a progressive utility or manufacturer. 1134.

Advertising and Publicity Writer—with practical knowledge of selling organization to employees and to the public. Experienced in employee publications and public relations through service with large western gas and electric company and two outstanding railroads. Trained thoroughly in modern advertising and publicity methods. Exceptional references from executives. 1135.

Salesman—experienced in practical selling and sales promotion of air conditioning equipment, gas appliances, pipe fittings. Has handled men and advertising, managed branch offices, organized and directed dealers. Widely travelled, knows all leading gas companies. College man. 1136.

Construction Engineer—Graduate mechanical Engineer, wide experience in the gas industry, successful background several large companies in the design and construction of gas and electric generating plants, gas distribution also allied industrial plants in the recovery of by product. Prefer East. 1138.

Gas Engineer. 1937 Ph.D. graduate in Gas Engineering. Wide experience in plant operation, business administration and scientific research. Good personality. Desire operating or research laboratory connection, management of small gas company, assistant to major executive (36). 1139.

Man 31 desires opportunity—Not just a job, but a chance to learn, and to use what experience, education and practical training I have already gained. Twelve years' experience in the natural gas accounting, engineering and purchasing departments, both customers and general offices. Would make a good man for any department. 1140.

SERVICES OFFERED

Gas Engineer, with solid background in operation of all kinds of manufactured gas plants. Familiar with natural gas distribution and change over. Valuation and rate case experience with Public Service Commission. Can handle executive or detailed work. Reliable, industrious and able to take hold, carry problem through. 1141.

Manufacturer's Representative or utility supervisor. Eight years' experience all types of gas appliances; thoroughly experienced in dealer merchandizing. Have sold for water heater and gas range manufacturers; also have utility company sales experience. Willing locate anywhere. Single (32). 1142.

Young man, married and now employed, having nine years' experience with a manufactured gas company, during which time he has served in all departments, desires to make a change for the purpose of advancement. Prefer cadet engineering (29). 1144.

Gas Engineer. College trained, age 38, married. Fifteen years' experience in all types of production high and low pressure distribution and transmission, construction and installation. Industrial and commercial installations and service a specialty. Go anywhere, available on thirty days' notice. 1145.

Executive type engineer, with wide experience in the gas industry, including design, construction, operation, and last four years on appraisals of production and distribution systems, including depreciation; experience gained during actual employment in various capacities with operating companies and with contracting gas engineering and equipment company. Work now successfully reflected in many gas and chemical plants. 1146.

As salesman or selling agent representing manufacturer in gas appliances, gas fired boiler, ranges, water heaters and the full line, have established trade for past fifteen years in metropolitan area, New York and two hundred mile radius, selling to the trade at wholesale and retail and gas companies, these appliances. 1147.

SERVICES OFFERED

Sales Engineer (M.E.) Thirteen years' experience in refrigeration and air conditioning, including research and development work in the utilization laboratory of a leading gas company. Additional experience in the problem of sales promotion, special applications and development of absorption refrigerators of both household and commercial size. Acquainted with sales methods. 1148.

Factory Representative, long established in the east, is desirous of adding another representation to his existing line. Experienced in industrial equipment as well as distribution and manufacturing ends of gas business. College Graduate. 1149.

Operator (29)—7 years' experience in all phases of gas business including water and coal gas operation, distribution, service, installation, sales and office work in large and small companies. Manager in three properties. General superintendent in three others. College graduate. 1150.

Sales Engineer, capable of managing house heating department in all its branches, covering surveys, installations, estimates, sales promotion, service, repairs and maintenance. Experience also covers industrial field with regard to high and low pressure boilers and large volume water heating. Broad general and technical experience. Married. 1151.

POSITIONS OPEN

House Heating Salesman. Experienced House Heating salesman for a natural gas company located in a middle west city. Heating rate very attractive. 0325.

By-product engineer, good technical background and broad experience, to construct and operate plant producing special metallurgical coke. Also require engineer for researching coking of carbonaceous materials. All our engineers advised this advt. Replies strictly confidential. 0328.

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